

chronic obstructive pulmonary disease (COPD, 27%), renal dysfunction (27%), stroke (21%), other cardiovascular disease (CVD, 78%). NNT to prevent one hospitalization annually (budget impact per HF patient in sample): 12 (-\$89) ACE-inhibitor/ARB, 15 (-\$60) beta-blockers, or 11 (-\$123) other cardiovascular drugs; -27 (\$92) hypertension, 11 (-\$179) psychological disorder, -12 (\$133) CIHD, -12 (\$118) diabetes, 13 (-\$98) hyperlipidemia, -10 (\$97) COPD, -8 (\$116) renal dysfunction, -12 (\$60) stroke, -8 (\$322) CVD. **CONCLUSIONS:** Increasing enrollment in state Medicaid plans and other entitlement programs call for more deliberate, proactive and cost-effective disease and risk management of plan enrollees. Substantive savings to Medicaid can be achieved with small changes in the prevalence of common comorbid conditions or prescribing rates.

## PCV42

## HOSPITAL BUDGET IMPACT OF READMISSION PENALTIES AND BUNDLED PAYMENTS: POTENTIAL IMPACT OF CORONARY STENT PLATFORMS

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**OBJECTIVES:** The Affordable Care Act established the Hospital Readmission Reduction Program (HRRP) and the Bundled Payments for Care Initiative (BPCI), which may reduce Medicare payments to hospitals. We assessed these programs' impact on hospital budget, focusing on the potential to reduce penalties via improved short-term percutaneous coronary intervention (PCI) outcomes. **METHODS:** A budget impact model was developed to quantify the financial penalties associated with HRRP and the difference between fee-for-service and bundled payments under BPCI for a hospital. HRRP penalties were associated with excess readmissions for patients admitted with acute myocardial infarction (AMI), pneumonia, and heart failure. The model also computed payment reductions under BPCI for all PCI patients regardless of diagnosis. An example hospital with high volume catheterization lab (1000 PCIs/year; 50% Medicare) and total Medicare DRG-based payments of \$110 million/year was considered. The hospital was assumed to have excess readmission ratios at the seventy-fifth percentile for each condition. Based on recent clinical trials of stent platforms, we assumed an absolute 1% reduction in PCI-related readmission due to AMI and revascularization over 30 days following PCI. **RESULTS:** Total HRRP penalties for the example hospital were calculated to be \$669,025, with \$199,130 additional reduction in payments under BPCI. Our model projected that reducing readmission post-PCIs by 1% would reduce excess readmission ratio for patients with AMI from 1.052 to 1.037 and thus HRRP penalties by \$80,975. Total cost of care for the 500 Medicare patients receiving PCI was reduced by \$43,791 due to reduction of subsequent clinical events, a savings accrued by hospitals under BPCI, resulting in net hospital savings of \$124,766. Achieving these savings with newer stent platforms would result in effective hospital savings of \$156/stent. **CONCLUSIONS:** A 1% reduction in PCI-related readmissions may substantially reduce penalties under HRRP and BPCI. Such reductions may be achievable using new stent platforms.

## PCV43

## BUDGET IMPACT OF THROMBOLYSIS FOR MYOCARDIAL INFARCTION WITH SUPRA ST IN COLOMBIA

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**OBJECTIVES:** Despite national and international guideline recommendations, only a small proportion (estimated in 39%) of ST elevation myocardial infarctions (STEMI) that arrive in the 8-hour "therapeutic window" in Colombia receive thrombolytic treatment; our objective was to estimate the budget impact of a gradual implementation of this therapeutic approach. **METHODS:** In our excel based model we applied ISPOR's principles of good practice for budget impact analysis. The perspective was from the Colombian health system; we used a 5-year time horizon (2012-2016). The model compared two different scenarios: continuing the current practice, with no increase in the proportion of thrombolized patients, while the other (Scenario 2) assumed a gradual increase (5 percentage points) of thrombolized patients, and an increase in tenecteplase use from (3 to 25% of all patients) along the five year period. **RESULTS:** Our estimated total cost of STEMI in Colombia for 2012, with 984 patients thrombolized nationwide, was US\$728,291. With an increase in the use of thrombolysis (Scenario 2) the cost would increase by US\$ 42,270 during the second year, US\$87,596 during the third year, US\$136,051 in the fourth year and US\$187,716 in the fifth year (with a 15% overall increase in the number of thrombolized patients). This cost increase is due to an increase in the target population (estimated by official demographic projections), an increase in the proportion of patients with myocardial infarction receiving thrombolysis and an increase in those receiving tenecteplase instead of streptokinase. **CONCLUSIONS:** Our country needs to allocate resources to prevent and treat cardiovascular diseases; applying current standards established in evidence-based guidelines of myocardial infarction treatment should be an affordable investment.

## PCV44

## COST OF PHARMACOTHERAPEUTIC MANAGEMENT OF HYPERTENSION IN A PRIVATE TEACHING HOSPITAL IN NIGERIA

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**OBJECTIVES:** The study assessed economic burden of pharmacotherapy in hypertension management on the National Health insurance Scheme (NHIS) of Nigeria, Health Maintenance Organizations (HMOs), the individual patients, and the companies as well as the economies of antihypertensives selection. **METHODS:** Two hundred and fifty case notes of hypertensive patients attending out-patient-department of the hospital (between August 1st - November 30th, 2011) were randomly selected. Selection criteria required that patients must be on at least an antihypertensive and first diagnosed after 2003. These were assessed for costs of pharmacotherapeutic management of hypertension as well as drug funding status. Requisite patients' information extracted from case notes included: hospital number, age, gender, occupations, drugs, dosages and patients' drug funding status. Drugs' prices were obtained from the hospital billing guide. Data analysis was carried out using Microsoft excel and SPSS v16.0 for windows. **RESULTS:** Two hundred and eight of the selected case notes met the study criteria out of which 125 (60.1%) were males, while 83 (39.9%) were females. Most of the patients work for the government 98 (47.1%). Others either work for private companies 51 (24.5%) or are self-employed 25 (12%). Retirees constituted 11.5% of the lot while 4.8% were unemployed. Diuretics were the most economical at an average monthly cost per prescription of 858.6 (\$5.51) and was closely followed by the beta-blockers at 1,101.1 (\$7.07). The total estimated monthly cost of the antihypertensives prescribed in the study was 892,650 (\$5730.93). HMOs having 104 (50.0%) of the cohort as enrollees incurred most of the cost at 446,325.0 (\$2865.47). NHIS and Companies with 75 (36.0%) and 17 (8.2%) of the enrollees respectively incurred 321,354.0 (\$2,063.14) and 73,197.3 (\$469.94). Private patients 12 (5.8%) incurred the least at 51,773.7 (\$332.39). **CONCLUSIONS:** HMOs and NHIS incurred most of the cost of antihypertensives prescribed and diuretics were the most economical of all.

## PCV45

## EVALUATION THE FEASIBILITY OF SOME SCHEMES OF ANTIHYPERTENSIVE THERAPY ON THE BUDGET IMPACT ANALYSIS AND MISSED OPPORTUNITIES ANALYSIS IN UKRAINE

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**OBJECTIVES:** Pharmacoeconomic analysis of two schemes antihypertensive therapy: diroton (lisinopril) (tab. 10 mg \*28, Gedeon Richter) compared with lipryl (tab. 10 mg \*30, BHFZ) and two regimens with fixed combinations of ACE (captopril) + diuretic (hypothiazide): kapozyd (tab. 50mh/25mh \*30, BMS) compared with captopres-D (tab. 50mh/25mh \*20, Darnitsa) for one year in Ukraine. **METHODS:** Cost minimization analysis, budget impact analysis and analysis of missed opportunities were used. **RESULTS:** In condition of equal efficacy lipryl is less expensive (costs of treatment per patient for year - 292 UAH) compared with diroton (costs of treatment per patient for year - 620.50 UAH). Indicator of missed opportunities in the transition to less expensive drug is 1.125. According to official statistics of Ministry of Health in Ukraine there are 12.1 millions patients with hypertension, or 32.2% of the adult population. The costs of lipryl treating this population are 3540 millions UAH, for diroton - 7522 millions UAH. The transition to lipryl economy of budgetary funds will be 3982 millions UAH. The analysis of two schemes of antihypertensive therapy with fixed combinations of ACE inhibitors (captopril) + diuretic (hypothiazide) shows that in condition of equal efficacy captopres-D is less expensive (costs of treatment per patient for year - 295.65 UAH) compared with kapozyd (costs of treatment per patient for year - 511 UAH). Indicator of missed opportunities is 0.728. Given the number of patients with hypertension, the costs of captopres-D treating this population will be 3584 millions UAH, for kapozyd - 6194.6 millions UAH. In condition of budget financing in the transition to captopres-D economy of budgetary funds will be 2610.6 millions UAH. **CONCLUSIONS:** The results of the analysis prove the economic feasibility of domestic antihypertensive drugs.

## PCV46

ECONOMIC IMPACT OF SWITCHING TO FIXED-DOSE COMBINATION THERAPY FOR JAPANESE HYPERTENSIVE PATIENTS: A RETROSPECTIVE COST ANALYSIS Akazawa M<sup>1</sup>, Fukuoka K<sup>2</sup>

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**OBJECTIVES:** The prescription of fixed-dose combinations (FDC) of antihypertensive drugs has increased rapidly since the relaxation of the prescription-term restriction. In this study, we used the opportunity of this policy change in Japan to examine the economic benefits of switching to FDC. **METHODS:** Claims data from 64 community pharmacies located in Tokyo were used to identify hypertensive patients under continuous treatment with angiotensin-receptor blockers (ARBs). Patients switching to FDC between December 2010 and April 2011 were compared to patients who did not receive FDC (control group). Changes in annual total and antihypertensive drug costs were compared for both groups, using a difference-in-differences approach to adjust for patient characteristics and use of concomitant medication. **RESULTS:** There were 542 patients who switched to FDC and 9664 patients in the control group. No significant differences were observed between the 2 groups, except for antihypertensive drug use patterns before the policy change. The switch to FDC was associated with annual savings of 6151 yen (US\$87.70) in total drug costs and 10,420 yen (US\$124.20) in antihypertensive drug costs. Approximately 20% of the FDC patients, however, switched from ARB alone and their treatment costs increased by 3795 yen (US\$37.10). **CONCLUSIONS:** For hypertensive patients who required ARB-based combination therapy, switching to FDC drugs had a significant cost-saving effect. However, the policy change of relaxing the prescription-term restriction could encourage aggressive treatment, i.e.,