

groups. **CONCLUSIONS:** No statistically significant difference in the effectiveness of oral Ibuprofen and oral Indomethacin compared to the intravenous NSAIDs with similar adverse outcome were observed. Oral formulations of Indomethacin and Ibuprofen might be considered as an alternative pharmacologic closure in PDA treatment for the NICU settings where intravenous NSAIDs is unavailable.

CV2

MANAGEMENT OF ISCHAEMIC STROKE PATIENTS ENROLLED IN THE JAPAN STROKE DATABANK (JSD)

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OBJECTIVES: To evaluate the management of ischaemic stroke (IS) patients enrolled in the Japan Stroke Databank (JSD) from 2000 to 2007. **METHODS:** JSD is an observational registry of patients who experienced a stroke event, collecting patient information provided by over 80 Japanese hospital departments. Data included demographics, time to admission, medical history, stroke type diagnosis, imaging, treatment, Japan Stroke Scale (JSS), NIH Stroke Scale (NIHSS) and the modified Rankin Scale (m-RS). Logistic regression model was used to identify predictors of m-RS 0-1 at discharge. **RESULTS:** Of the 47,782 stroke patients, when excluding for transient ischemic attack (TIA) cases, 15,282 (32%) were ischaemic stroke cases with NIHSS evaluation at hospitalization and at discharge and with m-RS assessment at discharge. Average age was 69.7 years (± 10.6) and 64% were males. Patients who were admitted to hospital at a later time window from onset had a lower m-RS score (0-1) at admission (12%, 13%, 15% and 17% for patients admitted at 0-3, 3-4.5, 4.5-8 and 8-24 hours, respectively). However, patients admitted at later time-windows had worse disability at discharge (within patients admitted with m-RS 0-1, 53% vs. 48% had m-RS 0 at discharge depending if admitted before or after 3 hours after onset). 57% of patients arrived after 3 hours and only 5.8% received thrombolytic treatment (2.1% received alteplase and the remaining received urokinase). Non-significant severity at baseline and alteplase with edaravone lowered the odds of severity at discharge. **CONCLUSIONS:** This study demonstrates that despite the availabilities of therapies for acute ischemic stroke there is still a high unmet need to reduce severity at discharge for these patients as only 5.8 % of patients receive thrombolytic therapy.

CV3

ECONOMIC EVALUATION OF CHANGE IN REIMBURSEMENT CRITERIA FOR LIPID-LOWERING DRUGS IN TAIWAN

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OBJECTIVES: As the international guidance for lipid control has evolved, the National Health Insurance Administration (NHIA) in Taiwan was requested to modify the current reimbursement criteria for initiation of lipid-lowering treatment. The study aims to evaluate the cost-effectiveness and the budget impact of the newly proposed reimbursement criteria on lipid-lowering drug from the NHIA's viewpoint with a focus on the change of statins usage. **METHODS:** In the new criteria, the cut-off points of low-density lipoprotein cholesterol (LDL-C) and total cholesterol for initiating lipid-lowering therapy for patients having diabetes or previous heart diseases (high risk group) have been lowered. A Markov decision model was constructed to examine the cost-effectiveness of the new criteria compared with the original ones. The efficacy of statins on coronary heart diseases (CHD) and stroke was obtained from the literature. The numbers of subjects who may be affected by these criteria changes and the LDL-C specific disease transition probabilities were obtained from a population-based survey conducted by the Taiwan Health Promotion Administration (HPA). Medical costs were derived from the NHI data. Both costs and health outcomes were discounted at 3%. The corresponding financial impact on NHI expenditure was also estimated. **RESULTS:** If the new criteria are applied, the number of subjects who fulfill the reimbursement criteria in the high risk group will be almost twice as many as before. This would lead to an great increase in the NHI expenditures for statins and monitoring costs, however, this could be offset by the treatment cost saved from the averted CHD and stroke cases. Therefore, the new criteria are a dominant strategy compared with the original criteria. **CONCLUSIONS:** Although the newly proposed reimbursement criteria would lead to an increase in drug expenditure of NHIA, it is expected to be a cost-saving strategy after taking into account the health benefit on preventing CHD and stroke.

CV4

DOES THE CURRENT RECOMMENDED TARGET LDL GOAL IMPROVE SURVIVAL FOR ACUTE CORONARY SYNDROME PATIENTS IN HONG KONG?

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OBJECTIVES: The current study primarily aimed to assess the current prescribing pattern of lipid-lowering agents and the percentage of LDL-C goal attainment in myocardial infarction (MI) patients in local practice, and to evaluate clinical outcomes of patients stratified by prescription of statins and by LDL-C level attained after discharge. **METHODS:** We retrospectively reviewed 696 hospitalized patients in the local ACS registry of Prince of Wales Hospital during 1 January 2008 to 31 December 2009 with data retrieved using computerized clinical records of all patients. **RESULTS:** Among the 402 MI patients included, 104 (25.9%) were not prescribed with statins at discharge. Percutaneous coronary intervention (PCI) performed or planned during hospitalization (OR: 0.324, $p=0.001$) and latest LDL-C level before discharge (OR: 0.221 for an increment of 1 mmol/L, $p=0.009$) were significant independent predictors of the absence of statin prescriptions at discharge. A sig-

nificantly lower all-cause mortality rate (14.4% vs 51.7%, $p<0.001$), fewer total hospitalizations ($p<0.001$) and fewer hospitalizations due to cardiovascular problems ($p<0.001$) were observed in patients discharged with statins. LDL-C goal attainment of < 100 mg/dL (2.6 mmol/L) resulted in a significant reduction in mortality (10.8% vs 24.2%, $p=0.001$), but not for goal attainment of < 70 mg/dL (1.8 mmol/L). Significant difference in survival existed only when LDL-C cut-off values were above 92 mg/dL (2.4 mmol/L). **CONCLUSIONS:** This study revealed a J-curve phenomenon in ACS patients of Hong Kong. Further research should be conducted to assess the necessity of aggressive LDL-C reduction to < 70 mg/dL (1.8 mmol/L).

HEALTH CARE REIMBURSEMENT STUDIES

HC1

RURAL EVALUATION OF PROVIDER PAYMENT REFORM UNDER THE NEW RURAL COOPERATIVE MEDICAL SCHEME IN GANSU PROVINCE, CHINA

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OBJECTIVES: The New Cooperative Medical Scheme (NCMS) which aims to reduce the risk of catastrophic health spending for rural residents has substantially improved health care access and utilization in China. However, cost containment and provider incentive remains a huge challenge, which has been particularly acute in poorer rural areas, such as the North-west. Over the past years, several counties in Gansu province have introduced a variety of provider payment reforms, shifting from the traditional Fee-for-Service to case-based, global budget and/or per-diem methods. This study provides the first impact evaluation of these reforms. **METHODS:** Using a quasi-experimental design, we collected NCMS claims data from 2008 to 2013 in three counties. A difference-in-difference analysis is performed to take advantage of the variation in provider payment methods implemented at different years across the counties. We also control for patients' age, gender and diagnosis as well as demographic factor of each county in estimating the effects of payment reform on cost (measured by inpatient health care expenditure) and quality (measured by readmission rate). In addition to the quantitative analysis, we conduct key informant interviews with policymakers, hospital administrators, and medical professionals to better understand the design and implementation issues involved in the reform process. **RESULTS:** Preliminary data analysis indicates that in one county, the provider payment reform is associated with 9.8% drop in total health care expenditure per admission. Length of stay fell by 4.9% as a result too. However, other factors such as changes in the demand-side reimbursement rate may also influence the outcomes. Differences in local infrastructure and technical capacity have led to the same payment method implemented differently at the county level. **CONCLUSIONS:** Provider payment reform in rural China can be an effective way to control health expenditure. However, more technical guidance on designing the right payment is needed for future reforms.

HC2

HEALTH CARE UTILIZATION AND COST COMPARISON BETWEEN ADHERENT HYPERTENSION PATIENTS TREATED BY SINGLE EXFORGE HCT AND

AMLODIPINE/VALSARTAN/HYDROCHLOROTHIAZIDE FREE COMBINATION

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OBJECTIVES: Single pill combinations (SPC) are associated with improved adherence and persistence in hypertensive (HTN) populations. High adherence and persistence can provide medical benefit for patients and reduce the total health care utilization and costs. This study investigated if Exforge HCT is associated with reduced health care utilization and costs during the 12 months follow up period in adult hypertensive (HTN) patients adherent to treatment. **METHODS:** A retrospective cohort study was conducted including adult (18 yrs. or older) HTN patients covered by commercial and Medicare Supplemental insurance in the Truven MarketScan database with an HTN diagnosis between October 2009 and December 2011. At least two filled prescriptions for Exforge HCT or two periods of minimum 15 days of concurrent use of amlodipine, valsartan and hydrochlorothiazide (FC cohort), and at least 80% Medication Possession Ratio (MPR) were required. Chi-Square tests and independent sample t-tests were used after propensity score matching (PSM) (absolute standardized differences (ASM) < 0.1) using demographics, comorbidities, pre-index HRU, pre-index costs and valsartan initial dose. **RESULTS:** Adherent Exforge HCT patients (N=6,004) had better outcomes compared to adherent FC patients (N=1,084) in the 12 months follow up period: less all cause hospitalization (9.2% vs 16.6%, $p<0.05$; Mean 0.1 vs 0.2, $p<0.0001$), less all cause ER visits (19.0% vs 29.3%, $p<0.05$; Mean 0.3 vs 0.6, $p<0.0001$), less HTN specific ER visits (7.0% vs 12.0%, $p<0.05$; Mean 0.1 vs 0.2, $p<0.0001$), less total medical service cost (\$7247 vs \$10370, $p<0.0001$), less total prescription drug costs (\$3926 vs \$5350, $p<0.0001$) and less total health care costs (\$11173 vs \$15720, $p<0.0001$). After applied PSM, adherent Exforge HCT patients still had lower proportion of all cause hospitalization, all cause ER visit and less number of all prescriptions, $p<0.05$. **CONCLUSIONS:** Real-world data indicate that Exforge HCT is associated with less health care utilization and costs compared to amlodipine/valsartan/hydrochlorothiazide FC among patients with adherent treatment of HTN.

HC3

ANTICIPATED PRICE DISCLOSURE: IMPACT ON FUNDING DECISIONS IN AUSTRALIA

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OBJECTIVES: Generic entry of pharmaceuticals in Australia triggers a price reduction of 16%, followed by further reductions via a process called 'Price Disclosure' (PD). Significant price reductions for standard of care (SOC) derived through PD