

and pharmacy/IV therapy services (\$9,484). Average cost per patient in all categories at 1-year post-AIS increased significantly from the pre-admission period. Diagnostic/lab services expenditures increased \$20,225; pharmacy/IV therapy services increased \$6,864; and outpatient visits increased \$2,484; all p-values < 0.001. Compared to the overall AIS patients, the early readmitted patients experienced higher resource utilization and expenditures. **CONCLUSIONS:** Economic burden of Medicare AIS patients is substantial. Resource utilization and direct costs were highest during the first 30 days of AIS hospitalization and doubles in the first year. Costs significantly increased in the year following stroke compared to the pre-admission year.

#### PCV84

##### THE TOTAL DIRECT HEALTHCARE COST OF AORTIC AND MITRAL VALVULAR DISEASE: EVIDENCE FROM US NATIONAL SURVEY DATA

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**OBJECTIVES:** This study quantified the total direct healthcare costs of aortic and mitral valvular disease to insurers and patients, stratified by asymptomatic and symptomatic disease status. **METHODS:** Using 1996-2011 data from the Medical Expenditure Panel Survey (MEPS), a large, nationally-representative database from the US, this study performed descriptive analyses of the total annual healthcare costs to insurers and patients for aortic and mitral valve disease. The healthcare costs were reported at the individual and US aggregate levels. Individuals with aortic and mitral valve disease were identified by International Classification of Disease Codes, 9th revision and stratified as either symptomatic or asymptomatic based on the presence of comorbid conditions. **RESULTS:** The MEPS database included 148 patients with aortic disease and 1,057 with mitral valve disease. Asymptomatic patients comprised 64% and 70% of the population for aortic disease and mitral valve disease, respectively. Symptomatic aortic disease patients incurred higher overall annual healthcare direct costs per patient compared to asymptomatic patients (\$30,146 vs. \$16,065). Symptomatic mitral valve disease patients incurred greater annual healthcare costs per patient compared to asymptomatic patients (\$14,054 vs. \$7,198). Because these were direct costs, the majority of the healthcare expenditures were borne by the insurer (range 79% to 90% based on type of disease and symptom status) rather than the patient. When aggregated to the US population, the overall annual direct cost was \$4.5 billion and \$10 billion for aortic disease and mitral valve disease, respectively. Approximately 75% and 52% of the total annual direct cost was attributed to symptomatic aortic valve and mitral valve disease patients, respectively. **CONCLUSIONS:** These findings indicate that the total direct healthcare costs of valvular disease are quite large. Symptomatic patients incur disproportionately greater healthcare costs, possibly due to costly surgical interventions required to treat their valvular disease.

#### CARDIOVASCULAR DISORDERS – Patient-Reported Outcomes & Patient Preference Studies

#### PCV85

##### PERSISTENCE AND COMPLIANCE WITH LIPID- LOWERING DRUGS IN PATIENTS WITH CHRONIC KIDNEY DISEASE

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**OBJECTIVES:** Among individuals suffering from chronic kidney disease (CKD) newly treated with lipid-lowering drugs (LLD): (1) to estimate persistence with LLD one year after treatment initiation; (2) among those persisting, to estimate compliance in the year following LLD initiation; (3) to identify factors associated with persistence and with compliance. **METHODS:** Using Quebec administrative databases we carried out a cohort study of individuals aged ≥18 who had started a LLD between January 1, 2000 and December 31, 2011. Individuals still undergoing treatment with any LLD one year after their first claim were considered persistent. Of these, we considered compliant those with a supply of drugs for ≥80% of days. We identified factors associated with persistence and with compliance using modified Poisson regression. **RESULTS:** Among 14,607 eligible individuals, 80.7% were persistent and 88.7% of these were compliant with their LLD. Individuals with low (Prevalence ratio: 1.03; 95%CI: 1.01-1.06) and medium socioeconomic status (SES) (1.04; 1.02-1.05) compared with those with high SES, treated by a nephrologist (vs. general practitioner) (1.06; 1.04-1.09), who had hypertension (1.04; 1.02-1.06), diabetes (1.04; 1.03-1.06), stroke (1.09; 1.07-1.12) or coronary disease (1.07; 1.05-1.09) were more likely to be persistent. Individuals more likely to be compliant were aged ≥66 (vs. 18-65) (1.04; 1.01-1.07), had low (vs. high) SES (1.08; 1.06-1.10), and had ≥12 (vs. <7) distinct drugs (1.03; 1.0-1.05), had been hospitalized (1.04; 1.02-1.06) or had stroke (1.04; 1.03-1.06) in the year prior to LLD treatment initiation. **CONCLUSIONS:** One year after LLD initiation, 28% of individuals with CKD were either no longer taking their treatment or had not been compliant to it. Results could help target individuals who need help to better manage their LLD treatment.

#### PCV86

##### INERTIA OR ACTUAL SWITCHING ON MEDICATION ADHERENCE AND ECONOMIC WELL-BEING OF MEDICARE BENEFICIARIES ENROLLED IN PART D PLANS

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**OBJECTIVES:** It is not well understood the relative impacts of switching (from brand name drug to generic drug or plan switching) and consumer inertia on medication non-adherence and economic well-being for individuals with at least four most common chronic conditions: diabetes, hypertension, heart disease and psychiatric problem. The goal of the current study is to examine the whether switching decision or consumer inertia impact medication adherence and/or economic well-being of

older adults **METHODS:** Medicare beneficiaries participated in the 2007 HRS prescription drug survey and 2009 HRS well-being survey and enrolled in Medicare part D (stand-alone), HMO, fee-for service or Advantage plans. The study sample includes 773 individuals with at least one of four common chronic health conditions and responded both years. Random intercept logit model was estimated for medication non-adherence and population based generalized estimating equation was utilized to examine poverty-adjusted well-being (excluding out-of-pocket medical expenditure from poverty threshold) **RESULTS:** Preliminary results indicate that individuals having inertia in plan switching were 3.4 times more likely to be non-adherent to regular prescription medications compared to those without inertia (odds ratio estimate, 3.4 with p<0.001). Neither switching from brand name drug to generic drug plan nor plan level switching appeared to be a significant predictor of medication non-adherence or economic well-being in this group. **CONCLUSIONS:** Consumer inertia rather switching decision appears to be a significant factor influencing medication non-adherence among individuals with four common chronic health conditions

#### PCV87

##### COMPLIANCE AND CONTROL OF HYPERTENSION WITH CO-MORBIDITIES IN PRIMARY CARE IN UKRAINE

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**OBJECTIVES:** The aim of this study was to evaluate adherence of family doctors to National Clinical Practice Guideline (2012) in the management of hypertension with co-morbidities in Ukraine. **METHODS:** Cross-sectional study was done at a primary care network in Ukraine. Total 62 physicians and 1550 patients' prescriptions written by same physicians (25 prescriptions per physician) were analyzed. All patients had hypertension with co-morbidities. Depending on the recommendations of National Clinical Practice Guideline (2012), the prescriptions were clustered as compliant and non-compliant prescriptions. All obtained data were analyzed using descriptive and inferential statistics. **RESULTS:** A statistically significant negative association ( $r = -0.089, p = 0.005$ ) was observed between hypertension control and co-morbidities. Compliant patients had statistically weak negative association ( $r = -0.078, p = 0.015$ ) with patients having co-morbidities (38.2%). No statistically significant association was observed between guideline adherence and any other co-morbidity. Majority of the patients received guidelines-compliant pharmacotherapy. The overall good level of physician compliance with National Clinical Practice Guideline (2012) was observed in the management of hypertension with co-morbidities. **CONCLUSIONS:** The study explored several features of prescription pattern of the primary care physicians involved in the management of hypertension with co-morbidities and recognized the need for improvement in their prescription pattern for treating the hypertension.

#### PCV88

##### COMPARING THE EQ-5D-3L AND SF-6D UTILITY SCORES OF ACUTE CORONARY SYNDROME PATIENTS FROM AN ASIAN POPULATION

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**OBJECTIVES:** EQ-5D and SF-6D can both be used to derive health utility scores. Variations in utility scores can have a major impact on the results of cost-utility studies. This study aimed to compare the health utility of acute coronary syndrome (ACS) patients from Malaysia measured by the two descriptive systems **METHODS:** Data was obtained from an earlier study. The study collected data from ACS patients admitted to the Sarawak General Hospital who consented to the study. Validated language versions of the EQ-5D-3L and SF-36v1 were administered during admission and 12-months post-admission. Health utility scores were calculated using the Malaysian EQ-5D-3L utility tariff and Brazier SF-6D algorithm. Patient demographic and clinical data were extracted from medical records. **RESULTS:** Data from 100 of 112 subjects were usable for analysis. Mean age of patients was 56.3 years and 88% were male. Utility scores measured by EQ-5D were higher than those measured by SF-6D. Mean utility scores from EQ-5D and SF-6D during admission were 0.75 and 0.56 ( $p < 0.0001$ ); and 0.82 and 0.79 ( $p = 0.0521$ ) 12 months post-admission, respectively. Improvement in utility scores from baseline to 12 months was statistically significant for both EQ-5D (0.06,  $p = 0.0300$ ) and SF-6D (0.23,  $p < 0.001$ ). EQ-5D and SF-6D utilities were moderately correlated at 12 months ( $r = 0.68, p < 0.0001$ ) but not during admission ( $r = 0.12, p = 0.2183$ ). Ceiling effect was observed in EQ-5D utility scores, whereby 22% and 29% of patients reported the best possible EQ-5D health state during admission and 12 months, respectively. Only 3% recorded the highest SF-6D utility at 12 months. **CONCLUSIONS:** Consistent with past studies, utility scores of ACS patients calculated by EQ-5D (Malaysian value set) and SF-6D (Brazier algorithm) resulted in different utility values, magnitude of change and extent of ceiling effect. Properties of patient reported outcome instruments should also be considered when selection utility measures for cost-effectiveness studies.

#### PCV89

##### HEALTH UTILITIES OF HYPERTENSIVE PATIENTS IN VIETNAM

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**OBJECTIVES:** With a lack of an essential evidence on utilities to support cost-effectiveness analysis of hypertension management in Vietnam, we aimed to gather data on health utilities for hypertensive patients and identify predictors of utility. **METHODS:** Hypertensive patients, from 40 to 80 years old visiting the hospital were invited to take a survey. Short-form 36 version 2 translated into Vietnamese was used to interview patients. We applied a specific published model to measure utilities, that explains a reasonable share of variance, especially in those cases when only relatively small differences in health are expected. **RESULTS:** 712 patients were included in the study. Mean utility of these patients was 0.72 +/- 0.14. Controlling