

we explored the influence of the price of apixaban. Conclusions are clearly, highly dependent on the assumed price of apixaban for this indication. **CONCLUSIONS:** The results indicate that there is great uncertainty regarding which treatment is the cost-effective alternative. Given current evidence, it may be too early to conclude that the new oral anticoagulants are cost-effective compared to warfarin.

#### PCV101 COST-EFFECTIVENESS MODELLING OF TELEMONITORING AFTER DISCHARGE FROM HOSPITAL WITH HEART FAILURE

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**OBJECTIVES:** To estimate the cost-effectiveness of home telemonitoring (TM) or structured telephone support (STS) strategies versus usual care for adults recently discharged (within 28 days) after a heart failure (HF) exacerbation in England and Wales. **METHODS:** A Markov model was used to evaluate three interventions: 1) STS via human to machine (HM) interface; 2) STS via human to human (HH) contact; and 3) TM, against 4) usual care. Given heterogeneity in the interventions, cost-effectiveness analysis was performed using bottom up costing scenarios. Costs and quality adjusted life years (QALYs) over a 30-year horizon were estimated based on monthly probabilities of death and monthly risks of hospitalisations (HF-related complications or other causes) estimated from clinical effectiveness parameters computed using a network meta-analysis of randomised controlled trials. **RESULTS:** Base case monthly costs per patient were: £27 for usual care, £119 for STS HM, £179 for STS HH and £175 for TM. TM was the most cost-effective strategy in the scenario using these base case costs. Compared with usual care, TM had an estimated incremental cost effectiveness ratio (ICER) of £9,552/QALY, whereas STS HH had an ICER of £63,240/QALY against TM. STS HM was dominated by usual care. Probabilistic sensitivity analysis (PSA) showed 44% chance of TM being cost-effective with STS HH 36%, STS HM 18% and usual care 2%, respectively. Threshold analysis suggested that the monthly cost of TM has to be higher than £390 to have an ICER greater than £20,000/QALY against STS HH. Scenario analyses performed using higher costs of usual care, higher costs of STS HH and lower costs of TM do not substantially change the conclusions. **CONCLUSIONS:** Cost-effectiveness analyses suggest TM was an optimal strategy in most scenarios, but there is considerable uncertainty in relation to clear descriptions of the interventions and robust estimation of costs.

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

##### PCV102 ANALYSIS OF THE IMPACT OF PRESCRIPTION SYNCHRONIZATION ON ADHERENCE AMONG MEDICAID BENEFICIARIES

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**OBJECTIVES:** A prescription synchronization and medication management program has been implemented in several community pharmacies to enhance medication adherence and provide greater efficiency in the pharmacy. The objectives of this analysis were to examine the impact of the program on chronic medication adherence and health care costs. **METHODS:** A cross-sectional analysis using Mississippi Medicaid claims from 2008-2011 was undertaken. Claims for three drug-classes including statins, antihypertensives, and oral hypoglycemics were extracted from a pharmacy that implemented the program and the other pharmacies serving patients in the same geographic area. First, a retrospective matched cohort analysis was undertaken to compare medication adherence measured as the proportion of days covered (PDC) and medical costs 3, 6, 9, and 12 months from the index date. Patients in the two groups were matched on age, gender, and race using a greedy-match algorithm. Second, a pre-post analysis comparing medication adherence and costs was conducted before and after the enrolling in the target pharmacy program. **RESULTS:** In the matched analysis, the average PDC three months (90.87% vs. 84.27%;  $p=0.002$ ) and six months (87.91% vs. 81.86%;  $p=0.01$ ) after the index date was significantly higher in the target pharmacy group than in the other group. Average medical costs 3 months (\$2,326.52 vs. \$1,802.41;  $p<0.0001$ ) and 12 months (\$7,505.36 vs. \$7,446.77;  $p=0.04$ ) after the index date were significantly higher in the other pharmacy group than in the target pharmacy group. In the pre-post analysis, the average PDC before enrolling in the target pharmacy service was significantly lower than after enrollment (70.3% vs. 84.2%;  $p<0.0001$ ). In addition, average medical costs per patient per month significantly reduced from \$584 in the pre-period to \$420 in the post-period ( $p<0.0001$ ). **CONCLUSIONS:** The new service was not only associated with improved medication adherence, but also with decreased medical expenditures among chronic patients.

##### PCV103 MEDICATION COMPLIANCE STATUS IN PATIENTS WITH HYPERTENSION AND ITS ASSOCIATED FACTORS IN URBAN CHINA

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**OBJECTIVES:** To understand current medication compliance status of hypertension and its associated factors in urban China. **METHODS:** A community-based hypertension health survey was conducted in 2 cities of China (Beijing and Hangzhou) from Nov 2011 to Aug 2012. 10 community health service centers in each city were selected through cluster sampling. Hypertension patients who registered in the study sites were recruited by field investigators using standardized questionnaires. Patient data were collected including socio-

demographic characteristics, disease profile, treatment pattern, and health education awareness. Medication compliance was assessed by Morisky score. Self-reported health utility and social support scale instruments were also employed. Logistic regression and multivariate analysis were used to explore the associated factors affecting medication compliance in hypertension. **RESULTS:** In total, 1006 patients with hypertension were included, with average age of 65.26±11.27 years old. 40.85% were male. The average duration of hypertension is 12.35±10.27 years. 761 patients (75.65%) managed to control blood pressure under 140/90 mmHG based on last blood pressure detected. 89.76% of the study subjects had less than 3 complications. Results show that 67.1% subjects achieved high level of compliance, 25.94% were moderate compliant, and 6.96% were non-compliant. The main influential factors of non-compliance were forgetting to take medicine (57.1%) and self-awareness of disease remission (32.6%). Multivariate analysis showed that compliance was positively associated with age, disease duration and social support, while negatively associated with existence of hypertension complications. Household income and reimbursement status were not major factors affecting medication compliance. Patients with high level of compliance also reported to have better health utility scores. **CONCLUSIONS:** The compliance status in hypertension in urban China is relatively poor. Strengthening family support and implementing effective health care are important to improve medication compliance in hypertension, which may lead to improved patient reported outcomes.

##### PCV104 IDENTIFYING PRIMARY NON-ADHERENCE RATES OF HMG-COA REDUCTASE INHIBITORS (STATINS)

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**OBJECTIVES:** Primary non-adherence occurs when a patient does not fill the prescription for a newly initiated medication. Contrary to the commonly researched concept of medication non-adherence (ie, secondary non-adherence), failure to start a new medication is less studied and can potentially pose a similar challenge to disease management. Our objective was to observe the primary non-adherence rate of newly initiated statins within 6 and 21 days of an electronic prescription. This study also explored differences in characteristics between primary adherent and non-adherent groups. **METHODS:** This was a retrospective observational study, using electronic prescriptions and pharmacy claims and sales records from Scott & White Health Plan (Temple, Texas, USA). Adult patients (n=2879) were included in the study if they had no prior exposure to any anti-hyperlipidemic drugs and received their first statin prescription from September 2009-May 2012. Outcomes measured included primary non-adherence rates within 6 and 21 days after a new statin prescription was written. Characteristics (eg, age, gender, race, Charlson Comorbidity Index, prescriber type) were compared between adherent and non-adherent groups using descriptive statistics and logistic regression. **RESULTS:** The 6- and 21-day primary non-adherence rates were 29.2% and 21.7%, respectively. Logistic regression of 6-day primary adherence revealed that women were less likely to be non-adherent than men (OR: 0.815; 95% CI: 0.693-0.960), and African Americans were more likely than whites to be non-adherent (OR: 1.486; 95% CI: 1.107-1.995). Patients were less likely to fill prescriptions written by allied health professionals than primary care providers (OR: 0.673; 95% CI: 0.465-0.974). **CONCLUSIONS:** This is one of the few studies to investigate primary non-adherence in a real-world setting, and the results may be helpful in solving another piece of the overall non-adherence puzzle. Exploratory analysis indicated that male gender and African American race were predictors of primary non-adherence to statins.

##### PCV105 TELEPHONE COUNSELLING FOR HYPERTENSIVE PATIENTS: DOES IT IMPROVE PATIENT ADHERENCE?

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**OBJECTIVES:** Despite the rising prevalence of hypertension and the availability of evidence-based guidelines for effective treatments, blood pressure (BP) control rates remain low. The purpose of this study was to evaluate the effect of telephone counseling intervention on blood pressure control. **METHODS:** Adults with hypertension attending the Centre for Diagnosis and Therapy of Arterial Hypertension of Cardarelli Hospital, Naples, Italy were randomly allocated to receive a pharmacist/counselor-administered counseling intervention (group I) or usual care (group C). Group I patients received the counseling intervention bi-monthly for two years via telephone; the goal of the intervention was to promote medication adherence and improve hypertension-related health behaviors. The telephone intervention focused on perceived risk of hypertension and knowledge, memory, medical and social support, patients' relationship with their health care provider, adverse effects of medication therapy, weight management, exercise, diet, smoking, and alcohol use. BP values were registered at baseline, after one year and at the end of the investigation for both groups. Medication adherence (Belief Medicine Questionnaire, BMQ) was also assessed. Analysis was performed using SPSS version 19.0 **RESULTS:** Group I consisted of 84 patients. A comparable sample was assigned to group C (n=80). The average phone call lasted 18 minutes (range 7 to 45 minutes). After two years there was a significant reduction of BP values for group I (t=0: Systolic=146.8±2.3 Diastolic=90.2±4.2, t=24 months Systolic=138.4±4.6 Diastolic=86.9±3.8) ( $P<0.001$ ). From baseline to two years, BMQ analysis showed an adherence improvement in group I (t=0 Necessity Score=15.6±3.5, concern Score=14.9±2.9, t=24 Necessity Score=22.4±2.4 and Concern Score=10±2.2). Group C did not show any statistically significant results. **CONCLUSIONS:** These findings suggest that