changes in MRL on payer’s and patient’s one year budget on the example of angiotensin II blockers. METHODS: The three models were build to assess the changes in payer’s and patient’s budget/per patient if therapy is conducted using: 1) the only original medications; 2) only generic medications; or 3) if therapy had been started with original medications and changed to the generic (after changes on the list). All costs in polish zloty (zł): 1 euro = 3.80 zł. RESULTS: In all models (from 1 to 3) the payer’s payment will decrease from 281 zł to 154 zł per patient. From the patient’s perspective the one year payment will rise from 767 zł to 1048 zł or from 449 zł to 777 zł—depends on medication (in model 1) and from 281 zł to 409 zł (in model 2), only in model 3 it will decrease from 767 zł to 409 zł. CONCLUSION: The changes in MRL may lead to reduction of payer’s expenditures and usually increase the patient’s expenditures. As a result it could leads to reduction in patient’s access to medications.

**PCV16**

**HEALTH INSURANCE COSTS OF STROKE HOSPITAL TREATMENTS IN HUNGARY, 2003-2005**

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**OBJECTIVES:** Our aim was to assess the social insurance costs of hospital treatments for acute stroke in Hungary between 2003 and 2005. We studied how much burden stroke patients impose on the financier (National Health Insurer Fund Administration) in acute and chronic hospital admissions. METHODS: We extracted the data of ‘new’ stroke patients (ICD-10: I60–64 diagnosis) hospitalized in May 2003 from the database of the financier. We analyzed acute and chronic hospital treatment costs of these patients in the period of 12 months before the stroke and in the following first and second 12 months. Data were distributed by sex and age (age groups: 25–44, 45–64, over 65). We studied patients hospitalized in May 2003 with the ICD-10: I60–64 main diagnosis. We compared costs and health states of patients hospitalized in May 2003 with and without HCR (glucose, cLDL). Patients with this profile use more resources (particularly more drugs) and have higher health care costs. Health professionals should develop common strategies oriented to control main cardiovascular risk factors in primary care.

**PCV17**

**METABOLIC CONTROL AND COSTS OF PATIENTS WITH HIGH CARDIOVASCULAR RISK; A CROSS SECTIONAL ASSESSMENT OF A HEALTH MANAGEMENT ORGANIZATION DATABASE**

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**OBJECTIVES:** Estimate the budget impact and the level of therapeutic goal attainment among patients with high cardiovascular risk (HCR) in a population attending primary care setting (PCS) and Hospital centres (HC) in a Spanish area. METHODS: Observational multicentre longitudinal study. Patients >55 years old from seven PCC and two HC were recruited during 2006. Definition of HCR as per modified NCEP-ATP III criteria. The control cohort: patients without HCR. Main measures: cardiovascular/general comorbidities, Charlson score (severity [ich]), clinical parameters (DP, SP, glucose, cholesterol, HCLc, LDLc) and total costs variable/semi fixed (visits, tests, drugs, admissions, derivations, emergencies etc). A logistic regression and covariance model was developed (ANCOVA-Bonferroni) to correct the models (comorbidities-cost). SPSS program was used. Level of significance was p < 0.05. RESULTS: In all, 24,410 patient were studied, 15.4% (n = 2,766; IC:14.9–15.9%; p = 0,000) had HCR, mean age: 68.2 ± 9.5 years, women: 55.2%. HCR was associated with: men (OR = 2.7; IC:2.5–3.0), dyslipidemia (OR = 1.5; IC:1.4–1.6); hypertension (OR = 1.2; IC:1.1–1.3); diabetes (OR = 1.1; IC:1.0–1.2) and ich (OR = 2.1; IC:1.9–2.2), p < 0.0001. Differences for the group with and without HCR were: Metabolic control: DP: 77.5 ± 9.5 vs. 74.8 ± 9.7; glucose: 104.0 ± 29.4 vs. 111.3 ± 36.5; Total cholesterol: 211.6 ± 38.7 vs. 192.4 ± 41.5; LDL-cholesterol: 128.7 ± 35.4 vs. 112.5 ± 36.0; p = 0.000. HCR was related to poly-pharmacy (62.5% vs. 26.1%) and average number of drugs (6.4 ± 3.5 for the HCR group vs. 4.0 ± 2.9), p < 0.001. Drugs accounted for 43.4% of total costs. Unitary adjusted cost per year was 2,445,985 € (IC:2,382,07–2,509,90) for the HCR group vs. 1,537,33 € (IC:1,505,53–1,569,13), p < 0.001. All components of costs showed significant differences between groups. CONCLUSION: Patients with HCR had higher rates of co-morbidity. Achievement of therapeutic objectives should improve in patients without hypertension and total cholesterol but with HCR (glucose, cLDL). Patients with this profile use more resources (particularly more drugs) and have higher health care costs. Health professionals should develop common strategies oriented to control main cardiovascular risk factors in primary care.

**PCV18**

**ECONOMIC BENEFIT OF IMPROVED PRESERVATION OF EXPLANTED ORGANS IN HEART TRANSPLANTATION**

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**OBJECTIVES:** Surgical techniques and immunosuppressive drugs have been improved over the past decades, while the method of preserving and transporting organs has not. In the UK only 22.3% of hearts from all consented heart beating donors were recovered in June 2005, whilst cold ischeamic time (CIT) increased by an average of 34 minutes over 8 years. The Organ Care System (OCS) may alleviate the organ shortage and improve transplant outcomes by maintaining explanted hearts in the normal functioning state ex-vivo. A health economic evaluation analysis was undertaken to compute the economic benefit of improved transportability of explanted hearts from the UK societal point of view. METHODS: Improved preservation with OCS plus heart transplantation (IPTx) was compared to medical management on the transplantation waiting list (MM) and heart transplantation with conventional cold preservation method (CPTx). We assumed that IPTx increases heart transplantation rates by 40% and reduces CIT to <1 hr. UK cost vectors were derived from the published literature. Twenty year direct medical costs and QALYs were calculated for each arm. Reducing CIT to <1 hr may extend the graft half life by 2.2 years (Schnitzler 2006). Discount rates of 6% were used for costs and 1.5% for QALYs. WTP for a QALY gain was assumed to be 30,000 British
Patients with congestive heart failure resource use and outcomes among elderly evaluating gender differences in health care patients with congestive heart failure

Abstracts

A MODEL-BASED ANALYSIS OF THE EFFECTS OF INTENSIFYING LIPID-ALTERING THERAPY ON DIRECT MEDICAL COSTS OF CORONARY HEART DISEASE EVENTS IN A SECONDARY PREVENTION POPULATION IN THE UNITED STATES

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OBJECTIVES: To assess the effects of various lipid-modifying strategies on direct medical costs of coronary heart disease (CHD) events among a representative patient cohort with established CHD.

METHODS: Model-based analysis, using data from clinical trials, published literature, and national databases to project CHD medical costs (emergency, inpatient, and outpatient) over 5 years. The analysis focused on hypothetical cohorts of 10,000 CHD patients (50 years of age or older) with any abnormal lipid parameter (LDL-C, HDL-C, Non-HDL-C, and/or TG). The expected number of CHD events was calculated using the Framingham Heart Study equation for secondary prevention. Age, sex, and coronary risk-factor data for patients with CHD were obtained from a nationally-representative US health survey. Direct medical costs were expressed in $US 2006, discounted annually at 3%. The drugs of interest included simvastatin (S) alone and fixed-dose extended release niacin/simvastatin (ERN/S), allowing an evaluation of increasing doses of S or adding a second agent to S.

RESULTS: Direct medical costs of CHD events over 5 years are estimated to be approximately $3436 per patient for patients treated with 20 mg of S. These costs would decrease by 8.8% with 1000/20 mg of ERN/S. Compared to more aggressive lipid therapy with 40 mg of S, 1000/40 mg of ERN/S would decrease CHD costs by 9.1%. Relative to a maximum dose of 80 mg of S, the maximum dose of ERN/S (2000/40 mg) would reduce CHD event costs by 11.2%.

CONCLUSION: Intensifying dyslipidemia treatment is warranted.

EVALUATING GENDER DIFFERENCES IN HEALTH CARE RESOURCE USE AND OUTCOMES AMONG ELDERLY PATIENTS WITH CONGESTIVE HEART FAILURE

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OBJECTIVES: Evaluate gender differences in resource use, expenditures and mortality among U.S. Medicare patients following discharge from a hospital admission for congestive heart failure (CHF).

METHODS: Analyses were conducted on national 5% sample of Medicare claims from January 1999 to December 2001. A cohort that had an initial hospitalization with a primary diagnosis of CHF was identified. Resource use at one year preceding and following the initial CHF admission was compared among males and females. Separate multivariate regression models were developed by gender to assess the factors associated with outcomes. Models included variables for patient characteristics, comorbidity, compliance with routine care and resource use in the year prior to CHF admission.

RESULTS: A majority of the 34,540 CHF patients were white (86%), one-half were 80 years or older and approximately 58% were female. Male CHF patients had a higher Charlson comorbidity score compared to females (4.27 vs. 3.99; p < 0.0001). Females were more likely than males to have an inpatient readmission within 365 days (58.6% vs. 41.2%; p = 0.016), an emergency department visit within 180 days preceding (58.3% vs. 41.7%; p = 0.0019) and following CHF admission (57.7% vs. 42.3%; p = 0.035), physician office visits within 365 days preceding (58.5% vs. 41.5%; p = 0.0001) and following CHF admission (57.7% vs. 42.3%; p = 0.0001). Females were also more likely than males to die within 60 days (56.3% vs. 43.7%; p = 0.0009), 90 days (56.5% vs. 43.5%; p = 0.006), 180 days (56.2% vs. 43.8%; p = 0.0001) and 365 days (56.1% vs. 43.9%; p < 0.0001) of the initial CHF admission. In multivariate models, factors associated with health care resource use, expenditures and mortality had similar trends in both gender models.

CONCLUSION: There appears to be gender differences in resource use and outcomes among CHF patients. Effort to better target interventions, diagnostic and therapeutic, among patients at higher risk of adverse outcomes carries potential for cost-effective management of CHF patients.

COST-EFFECTIVENESS OF HYPERTENSION TREATMENT IN GREECE: THE ECON-APROS STUDY

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OBJECTIVES: Determine hypertension-related costs and cost-effectiveness ratios of pharmaceutical treatment for patients with hypertension in Greece

METHODS: Data was derived from the PharmacoECONomic Assessment of Prognostic Risk Occupational Survey (ECON-APROS), a cross-country prospective study. The sample included individuals 30–75 yrs old, diagnosed with hypertension (Systolic Blood Pressure >140 mmHg and/or Diastolic Blood Pressure >90 mmHg), who were treated and monitored for a period of 1 year after the diagnosis. Patients were separated in two subgroups: a) those with uncomplicated hypertension (N = 1243) and b) those with complications e.g. CVD, CHD, MI etc. (N = 122). Demographic, clinical and socioeconomic information was collected. Cost analysis was based on the direct cost estimations and the measurement of the effectiveness was based on the absolute reductions in the mean SBP for each subgroup after 1 year of treatment. The perspective of the Greek NHS was taken. Tariffs are referred to 2006 prices and costs are expressed in Euros.

RESULTS: Mean direct cost per patient suffering from uncomplicated hypertension was estimated at €87€ per year while for the second subgroup was significantly higher at €717€ per year. Mean reduction in the patients’ Systolic Blood Pressure was 32.58 mmHg for the first subgroup and 34.38 mmHg for the second. Cost-effectiveness ratios for each subgroup were estimated at 21.16€/mmHg and 51.76€/mmHg, respectively, for every 1 mmHg lowering of the Systolic Blood Pressure.

CONCLUSION: The long term consequences of untreated hypertension are both life-threatening, for