inhibitors (HMGs). OBJECTIVE: The primary objective is to determine if there are differences among specific HMGs regarding the incidence of rhabdomyolysis. The secondary objective is to identify significant risk factors associated with rhabdomyolysis such as age, gender, and concurrent gemfibrozil use. METHODS: Retrospective pharmacy and medical claims from a large managed care organization were analyzed. Patients were included if they received any HMG (cerivastatin, fluvastatin, atorvastatin, lovastatin, pravastatin, or simvastatin) during the period between 7/1/99 to 12/31/99. All patients were followed for 6 months. ICD-9 diagnosis codes for rhabdomyolysis (idiopathic), myalgia and myositis not otherwise specified, or adverse effect to antilipemics were used to define rhabdomyolysis events. RESULTS: There were 133,454 patients identified who received an HMG during the identification period. The average age was 67.8 years (S.D. = 11.1) and 51.5% were female. The rates of rhabdomyolysis with and without concurrent gemfibrozil use were 0.861% and 0.632%, respectively (P = 0.13). Overall, the incidence across individual drugs was similar for cerivastatin [0.486% (95% CI = 0.363%–0.609%)], fluvastatin [0.679% (95% CI = 0.589%–0.769%)], atorvastatin [0.889% (95% CI = 0.783%–0.995%)], lovastatin [0.741% (95% CI = 0.158%–1.332%)], pravastatin [0.530% (95% CI = 0.468%–0.592%)], and simvastatin [0.378% (95% CI = 0.212%–0.544%)]. With concurrent gemfibrozil use, the incidence was significantly higher for cerivastatin [6.341% (95% CI = 3.005%–9.677%)] compared to fluvastatin [0.713% (95% CI = 0.000%–4.439%)], atorvastatin [0.494% (95% CI = 0.062%–0.926%)], lovastatin (0.0%), pravastatin [0.452% (95% CI = 0.091%–0.813%)], and simvastatin (0.0%). In a logistic regression model, there was no significant relationship between the incidence of rhabdomyolysis and age or gender. CONCLUSION: In this population, it appears that the risk of rhabdomyolysis is substantially higher when cerivastatin is used concurrently with gemfibrozil. The findings of this analysis indicate there is a substantial need for managed care organizations and pharmacy benefits management companies to proactively prevent the concurrent use of cerivastatin and gemfibrozil.

**PCV11**

**COST OF WARFARIN TREATMENT OF ATRIAL FIBRILLATION IN CLINICAL PRACTICE**

Abdelhafiz AH, Wheeldon N
Sheffield University, Sheffield, UK

OBJECTIVES: Trials of anticoagulation in non-rheumatic atrial fibrillation have demonstrated a reduction in the risk of stroke by two-thirds. In these trials, the safety of anticoagulation appeared good, but this may be related to highly selected patient groups. Exclusion rates of 93% were reported. Participants may have had fewer complications than might be expected among less selected patients in clinical practice. No trials had actually looked at the costs of anticoagulation in a real day-to-day clinical practice. The aim of this study is to investigate the actual cost of warfarin treatment of atrial fibrillation in a real clinical practice. METHODS: A one-year retrospective study involving patients of all ages admitted to hospital with non-rheumatic atrial fibrillation on long-term oral anticoagulation. Patients were interviewed and their medical records reviewed. The costs of anticoagulation were viewed as follows: 1. The cost of the active drug. 2. The cost of monitoring the patient’s INR i.e. traveling costs, staffing cost, and analysis costs. 3. The costs associated with bleeding complications. RESULTS: We studied 139 patients. The mean (SD) age was 73.6 (8.9) years, ranging from 41 to 93 years. The mean duration of oral anticoagulant therapy was 36 months (range 2 to 105 months), forming a total of 417 patient-years of treatment. Mean (SD) INR was 2.5 (0.36). The target range of 2.0–3.0 was achieved 54% of the time. Bleeding occurred in 21 patients, with incidence of 7.2% per patient-year for minor bleeding, 2.4% per patient-year for major bleeding and 0.2% for fatal bleeding. The cost of warfarin tablets was £14.6 ($23.36), per patient-year, but was £262.6 ($420.16), per patient-year after considering monitoring and bleeding complication costs. The cost per stroke prevented was estimated at £8,141 ($13,026). CONCLUSION: Anticoagulation appeared safe and cost-effective in clinical practice but control was not as good as in clinical trials.

**PCV12**

**QUALITY OF CARE IN OLDER PATIENTS ADMITTED TO HOSPITAL WITH HEART FAILURE**

Abdelhafiz AH, Wheeldon N
Sheffield University, Sheffield, UK

OBJECTIVES: To evaluate the quality of care given to older patients hospitalised with heart failure and to identify areas in which treatment could be improved. METHODS: A two-year retrospective study involving the analysis of the case notes of a random sample of 145 elderly patients (aged ≥75 yrs) admitted to hospital with heart failure. From The International Classification of Diseases, we identified patients with a principle discharge diagnosis of heart failure (ICD codes 428.0-428.1-428.9). Cases were excluded if the diagnosis could not be validated by medical record review. A total of one hundred and forty five patients formed all the admissions with heart failure during the study period. The standard of care received was evaluated using the relevant quality of care indicators derived from the Agency for Health Care Policy and Research (AHCPR) Clinical Practice Guidelines. RESULTS: The study sample included 145 patients. The mean age (SD) was 82 (5) years. Symptoms and signs of heart failure were documented in 145 (100%) patients. All patients with symptoms and signs of hypervolaemia received diuretic therapy. Only fifty-five patients (38%) had an objective assessment of left ventricular
function by echocardiography. After exclusion of patients in whom Angiotensin Converting Enzyme (ACE) inhibitors were contraindicated, only seventy-five (58%) patients received ACE inhibitors of whom, only 7 (9%) patients received the target dose recommended by the clinical practice guidelines. There was no documentation in the records regarding patient counselling about medication, diet, weight, exercise or smoking. CONCLUSION: ACE inhibitors were underused in elderly patients with heart failure; also achieving the target dose was poor. This data demonstrated a very low rate of use of echocardiography in elderly patients with heart failure. Counseling appeared to be a neglected aspect of patient care.

**PCV13**

**IMPACT ON QUALITY ADJUSTED LIFE YEARS OF ENOXAPARIN FOR PREVENTING THROMBOSIS AMONG HOSPITALIZED MEDICAL PATIENTS**

Raisch DW, Fye CL, Sather MR, Henderson WG, Reda DJ, Sacks JM, Lederle FL

1Veterans Affairs Cooperative Studies Program, Albuquerque, NM, USA; 2Veterans Affairs Cooperative Studies Program, Chicago, IL, USA; 3VA Medical Center, Minneapolis, MN, USA

OBJECTIVES: Prophylactic anticoagulants, such as low molecular weight heparin, to prevent thrombosis in hospitalized medical patients has been recommended in clinical guidelines, however the impact on quality adjusted life years (QALYs) is unclear. This pilot study evaluated enoxaparin for this indication among elderly (>age 59) hospitalized medical patients. METHODS: Patients were randomized to receive subcutaneous injections of enoxaparin 30 mg or placebo daily. Those patients with medical indications for anticoagulation (e.g., myocardial infarction, history of thrombosis) were excluded. QALYs were measured for the period of 30 to 90 days post randomization, using the Health Utilities Index (HUI). At 30 and 90 days, 51 and 40 patients in the active group completed the HUI versus 49 and 36 patients in the placebo group, respectively. Surveys were received at both time points among 40 enoxaparin and 21 placebo patients. QALYs and changes in domain scores were analyzed over the time between the two surveys. Data were analyzed using t-tests. RESULTS: Significantly more QALYs were gained (p = .007) among enoxaparin treated patients. The mean QALY values were 0.005 ± 0.015 vs −0.008 ± 0.015. The change in the HUI, Mark III domain score for ambulation approached significance (p = 0.053). The mean values were 0.012 ± 0.098 for enoxaparin versus −0.027 ± 0.056 for placebo. A significant change in the HUI, Mark II domain score for mobility was found (p = 0.017, mean values 0.015 ± 0.064 versus −0.022 ± 0.050). CONCLUSION: Among medical patients prophylactic treatment with enoxaparin was associated with increased QALYs.

**PCV14**

**IMPACT OF OBESITY ON HEALTH-RELATED QUALITY OF LIFE (HRQOL): AN ANALYSIS OF BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS) DATA**

Hassan M, Joshi AV, Madhavan S, Amonkar M

West Virginia University School of Pharmacy, Morgantown, WV, USA

OBJECTIVES: With over one-third of the population considered to be obese, obesity has reached epidemic proportions in the US. The direct costs associated with obesity are currently estimated at about $238 billion. As the underlying cause of many chronic diseases, obesity negatively impacts quality of life due to impaired physical and mental well being and reduced daily functions. The objective of this study is to evaluate the relationship between obesity and health-related quality of life using the Centers for Disease Control and Prevention’s (CDC) Behavioral Risk Factor Surveillance System (BRFSS) data. METHODS: The BRFSS is an ongoing, state-based, random digit dialed telephone survey of the civilian, non-institutionalized population aged 18 years and older. Data from sixteen states that collected information on health status (4 items), HRQoL (10 items), and demographic characteristics including weight and height from 50,000 participants in 1998 were utilized for the analysis. Participants who had a Body Mass Index (BMI) ≥ 30 were defined as obese. Prevalence of obesity by demographics and disease presence was determined, as were corresponding HRQoL scores. RESULTS: On the basis of BMI, 31.9% of the respondents were identified as obese. Obesity was higher in males as compared to females and higher among African-Americans and Hispanics as compared to whites. Obesity increased with age but decreased as income and education increased. Obese respondents reported poorer health status. Impact of obesity on HRQoL due to reduced physical and mental functioning in the presence of no health problems, as well as in presence of self-reported major health problems such as arthritis, cardiovascular disease, diabetes, cancer, depression, and pulmonary disease is discussed. CONCLUSIONS: Health related quality of life is significantly affected due to obesity and should be an important consideration in the treatment of obesity. It also has important implications in cases of illnesses that have obesity as an underlying cause.

**PCV15**

**ECONOMIC EVALUATION OF OUTPATIENT ANTICOAGULANT/ANTITHEPLATELET THERAPY FOLLOWING CORONARY STENTING IN A MANAGED CARE POPULATION**

Liao E, Fronk M, Newell J, Huse D

PharMetrics, Inc. Watertown, MA, USA

OBJECTIVE: To determine the impact of outpatient anticoagulant/antiplatelet therapy on treatment charges in