OBJECTIVE: Patient compliance is an important component in the successful management of any disease. In general, it is assumed that in disease states involving periodic, intense pain, such as angina pectoris (AP), compliance rates would be high, and unaffected by dosing regimen. We verified this hypothesis by examining the compliance rates of patients taking different formulations (o.d. (200–300mg), b.d. (90–120mg) and t.d.s. (60mg)) of diltiazem (princeps) for AP. METHOD: We performed a retrospective analysis of 3455 electronic patient records with a diagnosis of AP and a prescription of diltiazem (princeps) from June 1st 1997 to June 1st 1998 (Mediplus-IMS Health) with a one-year follow-up. The above patient cohort was then divided into 3 subgroups according to the different formulation taken. The two subgroups b.d. and t.d.s. were paired to the third one, according to 4 criteria: age, sex, disease history and comorbidities. Compliance was assessed using initial prescription and refill rates ((pills dispensed/daily dose/duration of therapy). RESULTS: The proportion of patients showing “good compliance” (> 0.8) was significantly higher for the o.d. versus b.d. (36.1% versus 25.9%, p = 0.001) and for the o.d. versus t.d.s. (36.1% versus 27.1%, p = 0.008). We observed the same trend when we compared the mean rate of compliance for the o.d. versus b.d. (0.62 versus 0.55, p = 0.0027) and for the o.d. versus t.d.s. (0.62 versus 0.60, p = 0.0121). CONCLUSION: Even for life threatening cardiac disease like AP, dosing regimens have a significant effect on compliance. Giving diltiazem as an o.d. formulation could significantly improve compliance and potentially decrease health care resources used.

**PCV9**

AN ECONOMIC ANALYSIS OF CONGESTIVE HEART FAILURE (CHF) IN THE LOUISIANA MEDICAID PROGRAM

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OBJECTIVE: To examine the cost of illness of Congestive Heart Failure (CHF) in the Louisiana Medicaid program. METHODS: Study design: A retrospective review of the medical and pharmacy claims data (1999–2000) in the Louisiana Medicaid program. We reviewed pharmacy and medical claims data for the years 1999–2000 from the Louisiana Medicaid program. The data were obtained from Unisys, the fiscal intermediary for the Louisiana Medicaid program, in a PC compatible format. We extracted the claims for CHF patients on the basis of the ICD-9-CM codes. A total of 13,947 patients met the study criteria, which included at least one primary or secondary diagnosis of CHF and availability of claims data for at least one year after the first CHF diagnosis related claim. We reviewed all the charges incurred for a one-year period after the initial CHF claim. RESULTS: The total cost for CHF patients for one year was over $182 million. The majority of the patients (73.63%) were female and accounted for 70% of the total cost. The mean age was 70 years and the largest portion of the total cost (55%) came from those 65 years and older. Of the 13,947 patients 11,065 (79%) were hospitalized at an average cost of $4,679 per hospitalized patient. Approximately 87% of the study population received prescription drugs at an average cost of $2,897 per prescription drug user. Hospitalizations and prescription drugs contributed 28% and 19.38% respectively to the total cost. Almost one third of the total cost was due to long-term care at $13,817 per utilizer. Costs for CHF diagnosis related claims were 14% of all costs. CONCLUSION: CHF represents a significant financial burden from the perspective of the Louisiana Medicaid program. Improved management of the condition is needed to reduce the cost of treatment associated with CHF.

**PCV10**

INCIDENCE OF RHABDOMYOLYSIS IN PATIENTS INITIATED ON HMG CO-A REDUCTASE INHIBITOR THERAPY IN A MANAGED CARE ORGANIZATION

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Recent evidence suggests there is an increased risk of rhabdomyolysis in patients initiated on cerivastatin compared to patients initiated on other HMG CoA reductase inhibitors.
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%-1.439%)], 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**

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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**

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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