required a discount greater than 61% and 71%, respectively, from the branded WAC to achieve cost per unit of LDL-C reduction lower than generic lovastatin. CONCLUSION: To facilitate effective and efficient management of patients with dyslipidemia, a tiered formulary could include generic simvastatin or pravastatin as the cost-effective generic statin in the first tier (depending upon level of discount to current WAC) and rosuvastatin as the cost-effective branded statin in the second tier.

PCV31

COST-EFFECTIVENESS OF ACHIEVING ADDITIONAL LIPID TARGETS WHEN SUBSTITUTING FENOFIBRATE 145 MG FOR STANDARD FENOFIBRATE THERAPY

Sorensen SV1, Frick KD2, Burge R1, Simko RJ3
1United BioSource Corporation, Bethesda, MD, USA, 2Johns Hopkins University, Baltimore, MD, USA, 3Abbott Laboratories, Abbott Park, IL, USA

OBJECTIVES: Clinical evidence suggests that achieving recommended HDL-C levels reduces the likelihood of CHD events and mortality. The benefits of standard fenofibrate formulation on HDL-C and triglyceride levels (TG) are well established; however, full benefits have typically required administration with food. Furthermore, evidence suggests that as many as 30% of people do not comply with food requirements. A new formulation of fenofibrate (fenofibrate 145) that does not require administration with food has been developed. A cost-effectiveness model was developed to determine the incremental cost of meeting additional recommended lipid levels when fenofibrate 145 is substituted for a standard fenofibrate formulation that requires food administration in a diabetic population.

METHODS: A simulation model using a managed care perspective was designed to predict changes in lipid levels [HDL-C, LDL-C, TG, and total cholesterol (TC)] and associated drug costs based on Wholesale Acquisition Costs over the course of 1 year. Lipid targets were based on NCEP-ATP III. A hypothetical cohort of 1000 was modeled for a diabetic population with abnormal lipid levels based on NHANES data. Lipid changes were based on the study of fenofibrate by Athyros, et al. 2002. A reduction in efficacy for each lipid parameter, based on previously reported work, was applied against patients on standard fenofibrate therapy (requiring food co-administration).

RESULTS: In a cohort of 1000 patients, substituting fenofibrate 145 for standard fenofibrate therapy resulted in 9.4% more diabetic patients reaching TG targets. Seventy-two more patients (11% increase) on fenofibrate 145 achieved at least 2 targets and 27 more patients (18% increase) achieved at least 3 targets. The incremental 1 year cost per additional patient reaching TG targets was $0.78. CONCLUSION: Substituting a non-food requiring fenofibrate for a standard fenofibrate increases the number of patients achieving TG and multiple target goals at 1 year at a low cost.

PCV32

IMPACT OF DEPRESSION ON HEALTH STATUS AND HEALTH CARE UTILIZATION IN PATIENTS WITH HYPERTENSION: RESULTS FROM THE MEDICAL EXPENDITURE PANEL SURVEY (MEPS 2002–2003)

Shi L1, Liao EK2, Khan M3
1Tulane University, New Orleans, LA, USA

OBJECTIVES: Previous studies have examined the association between depression and hypertension. This study aims to examine whether health status and health care costs differ between hypertensive patients with and without depression.

METHODS: The study sample was all adult survey respondents with a self-reported diagnosis of hypertension from the MEPS (2002–2003). These respondents were also asked about the presence of conditions related to depression. Health status measures include SF-12 physical component summary (PCS) and SF-12 mental component summary (MCS) score, and EQ-5D utility score. Health care utilization was explored in the following categories: outpatient, inpatient, dental, and pharmacy. The impact of depression on health status or health care utilization was explored using multivariate linear regression models with depression as an independent dummy variable, after controlling for age, gender, ethnicity, marital status, income, and health insurance.

All analyses are weighted to the US population by the personal level weights reported in the MEPS data set. RESULTS: Among a total of 5052 MEPS respondents having hypertension, 1962 reported having (38.84%) depression problems. These two groups (with and without depression) were comparable in age and ethnicity. Female hypertensive patients with lower income level or with Medicare or Medicaid coverage had a higher proportion of depression. In regression models, hypertensive patients with depression had worse health status: SF-12 PCS score (--5.6, p < 0.0001), SF-12 MCS score (--13.5, p < 0.0001), and EQ-5D utility score (--0.20, p < 0.0001). Hypertensive patients with depression had higher utilization of outpatient ($415, p < 0.0001) and pharmacy ($10, p < 0.0001) services, but both groups had comparable expenditures in inpatient care ($0.09, p < 0.0001) and dental service ($23, p < 0.05).

CONCLUSION: In the U.S. population, hypertensive patients with depression had poorer health status and higher health care expenditure in outpatient services and prescription drug compared with those without depression. The difference in inpatient cost between these groups was very small.

PCV33

ANALYSIS OF CLOPIDOGREL USE IN OUTPATIENT SETTINGS

Bae J1, Bellebaum KL2, McCollam PL1
1Eli Lilly and Company, Indianapolis, IN, USA, 2Ohio State University, Columbus, OH, USA

OBJECTIVES: Using recent US national claims data, this study examined characteristics of managed care patients taking clopidogrel in outpatient settings and analyzed patterns of use.

METHODS: This retrospective study identified patients with oral antiplatelet claims in a large, national, managed care claims database (Pharmetrics) between 1/2003-6/2006 (n = 47,364). All medical and pharmacy claims were analyzed during this period. Analysis focused on outpatient use patterns of clopidogrel and patient characteristics, e.g., demographics, comorbidities, inpatient history, and other cardiovascular medication use. Aspirin therapy was not available in the prescription claims data.

RESULTS: Clopidogrel was the most widely prescribed antiplatelet, representing 93% of all prescriptions. Men represented 65% of the patients taking clopidogrel. The mean age was 56.9 years, with 69% of individuals aged 50 to 65 years. The most common outpatient diagnoses were essential hypertension (61%), unspecified hyperlipidemia (57%), hypercholesterolemia (44%), and unspecified chest pain (43%). On average, users of clopidogrel had 3.41 prescriptions per month in 2006 at a health plan cost of $376.50/month. Average length of therapy for clopidogrel had 39.2 prescriptions per month in 2006 at a health plan cost of $376.50/month. Average length of therapy for clopidogrel was 292 days. By patient type, it varied from 283 days for coronary artery bypass surgery, 336 days for percutaneous coronary intervention (PCI), and 344 days for stroke. However, 10.4% of PCI patients took clopidogrel for ≤30 days. Patients refilled their clopidogrel prescriptions for 93% of the daily regimen needed during therapy. Frequent concomitant cardiac medications included statins (63.9%), beta-blockers (55.0%), ACE-inhibitors (48.7%), and diuretics (14.2%). Data show that 40–50% of patients discontinued another concomitant cardiac
COST OF CONSUMABLES ASSOCIATED WITH CARDIOVASCULAR COMPUTED TOMOGRAPHY ANGIOGRAPHY: THE CARDIOLOGIST’S PERSPECTIVE
Vishalpura T1, Callister TQ2, Sarnes MW
1Xcenda, Yarldly, PA, USA; 2Tennessee Heart and Vascular Institute, PC, Hendersonville, TN, USA; 3Xcenda, Palm Harbor, FL, USA
OBJECTIVES: Computed tomography angiography (CTA) scanners have advanced patient care by providing cardiologists with the latest in imaging technology. When deciding to purchase a CTA scanner, practices must evaluate the economic feasibility of ownership in terms of both fixed (eg, equipment and facility costs) and variable costs (ie, consumables costs). The objective of this study was to provide cardiology practices with a comprehensive cost estimate for the cost of consumables incurred for CTA procedure. METHODS: Practice patterns from a large cardiology practice were evaluated for all CTA procedures over an eight-month timeframe. The various consumables utilized for CTA procedures were captured and classified into three main categories: contrast media, drugs, and medical supplies. The average utilization of each consumable was then calculated, and the unit acquisition cost for each consumable was applied to quantify the average cost of consumables per CTA procedure. RESULTS: From January 2006 through August 2006, data from 3119 procedures were evaluated. The average cost of consumables per procedure incurred by the practice was $83.31. Of this cost, $32.55 was incurred for contrast medium. Additionally, $9.91 was the average cost per procedure incurred for drugs such as beta blockers, solu-medrol, diphenhydramine, intravenous fluids, nitroglycerin spray, and antiemetics. The largest component of consumables was medical supplies (eg, syringes, needles, tubing, cannulae, intravenous catheter, dressing/bandages, table paper, gloves, alcohol pads, etc), which cost the institution an average of $40.85 per procedure. CONCLUSION: When evaluating the economic feasibility of operating a CTA scanner, cardiology practices can expect to incur an average of $83.31 per procedure for consumables.

IMPACT OF NESIRITIDE ON TREATMENT OF ACUTE DECOMPENSATED HEART FAILURE (ADHF): EVIDENCE FROM A US HOSPITAL DATABASE
DiDomenico R1, Sengupta N2, Barker C2
1University of Illinois at Chicago, Chicago, IL, USA; 2Scios Inc, Mountain View, CA, USA
OBJECTIVES: Compare impact of nesiritide (a recombinant natriuretic peptide approved for intravenous treatment of ADHF) administration within first day versus after first day on in-hospital outcomes using an inpatient claims database of 400 US hospitals and 600,000+ discharges (PREMIER). METHODS: From 681,690 discharges during 2003 and 2004 in the PREMIER database, we studied patients with DRG 127 at discharge and ICD 9 codes for primary diagnosis of CHF. First day nesiritide (D1) was defined as nesiritide + diuretic administration within 1st day of hospital admission; post-first-day administration (post-D1) was defined as nesiritide administration after first hospital day with diuretic therapy during first day. Four outcomes variables were analyzed: discharge status, hospital and ICU LOS, and hospitalization cost. Propensity matching and propensity covariate adjustments were performed in all regression analyses to remove bias in between-group comparisons. RESULTS: In all, 8126 patient discharge episodes were identified as D1 and 793 as post-D1. The D1 group had reduced mortality odds versus post-D1 (0.46, 95% CI: 0.36, 0.59, P < 0.0001). Hospital and ICU LOS were shorter for D1 versus post-D1 (−4.5 days [95% CI: −4.9, −4.2, P < 0.0001] and −1.7 days [95% CI: −2.2, −1.5, P < 0.0001], respectively). Hospital costs were lower for D1 patients (D1-Post D1): $6642 (95% CI: $7226, $6058, P < 0.0001). Adjusted and unadjusted analyses on all four outcomes were consistent and achieved statistical significance. CONCLUSION: This analysis demonstrated that in two groups of propensity-matched hospitalized patients, those treated with nesiritide within the first day of hospital admission have better outcomes than those treated with nesiritide later. These findings are based on retrospective data sources. A recently announced prospective randomized, controlled global clinical trial enrolling 7000+ patients (ASCEND-HF) will provide additional information.

THE EFFECT OF DRUG COST-SHARING ON ADHERENCE TO CHRONIC MEDICATIONS
Patrick A1, Maclure M2, Dormuth C1, Glynn RJ3, Schneeweiss S4
1Brigham and Women’s Hospital, Boston, MA, USA; 2University of Victoria, Victoria, BC, Canada; 3University of British Columbia, Vancouver, BC, Canada; 4Harvard Medical School / Brigham and Women’s Hospital, Boston, MA, USA
OBJECTIVES: To study the effects of two sequential changes in drug cost-sharing policies on adherence to statins and beta-blockers by seniors in British Columbia. METHODS: For each drug class, we identified a baseline cohort of subjects initiating therapy in the 6 months prior to January 1, 2001, a co-payment cohort at this time, 9 months after the introduction of the co-payment policy introduced January 1, 2002, and a co-insurance cohort initiating therapy in the 6 months prior the co-insurance policy introduced May 1, 2003. We calculated the proportion of patients adherent in each cohort each month, with follow-up for each cohort beginning at the start of that cohort’s recruitment period and ending 15 months later. Patients were defined as adherent during a month if they had a proportion of days covered (PDC) of 80% or greater, calculated by dividing the number of days the patient had drug supply available by the number of cohort membership days the patient contributed in that calendar month. RESULTS: In the baseline cohort, which did not experience cost-sharing, 53.8% of statin initiators were adherent to their statins at month 15. The adherence level in the co-payment cohort at this time, 9 months after the introduction of the co-payment policy, was 50.5%. 50.8% of co-insurance cohort members were adherent. Adherence to beta-blockers was lower, with 48% of the baseline cohort initiators adherent at month 15. However, the introduction of the co-payment and co-insurance policies reduced this adherence level by only 1 percentage point. CONCLUSION: The introduction of the co-payment and co-insurance policies reduced adherence to statins by 5 percentage points relative to baseline levels, but had a much smaller effect on beta blocker adherence levels. Policy-