stroke event incidence between groups was analyzed descriptively and through a multivariate logistic regression analysis after controlling for differences in baseline clinical and demographic variables. RESULTS: Among 8176 study patients (3493 AM; 4693 IAM), AM patients were significantly older [51.4 ± 9.1 and 50.0 ± 9.6 years, p < 0.01] and comprised of fewer males (43.2% vs. 56.2%; p < 0.01). AM patients were more likely to be at lower risk status at index date versus IAM patients (63.4% vs. 28%; p < 0.01), and had a significantly lower Deyo-Charlson comorbidity score (0.32 ± 0.56 vs. 0.20 ± 0.44; p < 0.01). During follow-up, fewer AM patients experienced a stroke event versus IAM patients (0.7% vs. 1.1%; p = 0.03) and thereby were 36% less likely to have a stroke event (OR: 0.64, 95% CI: 0.44–0.93; p < 0.01). CONCLUSION: Adhering to clinical guideline treatment recommendations was likely to be associated with subsequent stroke reductions and possible long-term cost savings in this managed care population.

SYSTEMATIC REVIEW OF NICARDIPINE IN NEUROVASCULAR CONDITIONS
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OBJECTIVE: Injectable nicardipine is increasingly used in managing neurovascular conditions. To understand its place in therapy, we conducted an evidenced-based literature review. METHODS: The English-language literature in OVID and Cochrane databases was searched using combinations of these terms: intracerebral hemorrhage (ICH), neurology, neurosurgery, nicardipine, stroke, subarachnoid hemorrhage (SAH). Two-hundred and twenty-three abstracts were identified; after independent review by two individuals, four clinical guidelines, two meta-analyses, and four randomized controlled trials (RCT) were deemed relevant. RESULTS: In clinical guidelines, based on expert opinion, nicardipine was recommended to manage hypertension in 1) ischemic stroke patients eligible for acute reperfusion therapy (alternatives: labetalol, nitropaste, and nitroprusside); and 2) ICH (alternatives: enalapril, esmolol, hydralazine, labetalol, nitroprusside, nitroglycerin). In a meta-analysis, nicardipine had no effect on death or dependency in patients with aneurysmal SAH [RR:0.97 (95%CI:0.78–1.20)]; adverse events were higher versus placebo [hypotension:34% vs. 5%; phlebitis:22% vs. 5%; pulmonary edema + azotemia: 6% vs. 2%]. In acute traumatic brain injury, nicardipine had no impact on death and severe disability [RR:0.25 (95%CI:0.05–1.27)]. Nicardipine’s effect on cerebral blood flow was comparable to labetalol (+0.19 ± 3.9 ml/100 g/min vs. –1.55 ± 3.2 ml/100 g/min; p = 0.39) in ICH, while it increased from baseline in SAH patients (42.1 ± 12.3 ml/100 g/min vs. 47 ± 10.7 ml/100 g/min; p < 0.05). In a craniotomy RCT, nicardipine was less effective than labetalol in preventing emergent hypertension (50% vs. 82%; p = 0.05) and was associated with more tachycardia (20% vs. 0%; p = 0.11), hypotension (15% vs. 0%; p = 0.23) and higher cost ($23.65 ± 6.62 vs. $5.23 ± 2.0; p < 0.05). Mean arterial pressure remained depressed 20 minutes post-infusion compared to nitroprusside, despite lack of cumulative nicardipine plasma levels [60 ± 2 mmHg vs. 73 ± 4 mmHg; p < 0.05] in spinal surgery patients. CONCLUSION: While nicardipine has a role in select neurovascular indications, recommendations are based on expert opinion. Moreover, a lack of benefit has been demonstrated in meta-analyses and RCT in other neurovascular indications, including aneurysmal SAH and acute traumatic brain injury.

APPROPRIATE UTILIZATION AND COST-SHARING OF ADD-ON EZEITIME LIPID-LOWERING THERAPY AT THE VETERANS AFFAIRS SAN DIEGO HEALTH CARE SYSTEM (VADHS)
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OBJECTIVE: The current study evaluated the appropriate utilization of ezetimibe add-on therapy to simvastatin and the cost-consequences based upon the following outcomes: ezetimibe response, LDL-C goal achievement, and switch to rosuvastatin. METHODS: This was a retrospective review of VADHS medical records to identify patients with active prescriptions for ezetimibe and simvastatin between January 1, 2004 and August 31, 2007. Base-case response was defined as ≥10% LDL-C reduction from baseline at study endpoint. Additional efficacy parameters included LDL-C goal achievement and switch to rosuvastatin if LDL-C goal not met. Pre-post analyses for continuous and binomial data were performed using Wilcoxon-ranked sum and McNemar’s tests, respectively. Cost analyses were conducted from the payer perspective, utilizing total direct costs. Average cost-effectiveness ratios (CER) were calculated for (1) ezetimibe response, (2) LDL-C goal achievement, and (3) switch to rosuvastatin. Sensitivity analyses were performed varying the base-case response definition. RESULTS: Overall, 121 patients met inclusion. Baseline characteristics were as follows: male 97.5%; Caucasian 78.5%; CHD 67.8%; diabetes 63.6%; symptomatic CAD 15.7%; PAD 18.2%; AAA 7.4%; >20% 10-year risk-score 95.9%; LDL-C goal <100 mg/dL 95.9%; LDL-C goal <70 mg/dL 59.7%; and smoker 28.1%. Pre-post comparisons showed significant differences from baseline LDL-C and cholesterol for both responders (p < 0.001, p < 0.001) and non-responders (p = 0.028, p = 0.028). Overall, 88.4% of patients responded to ezetimibe, while 36% of non-responders had their antilipemic regimen modified. In addition, 53% of patients reached LDL-C goal. Average CERs over a 9-month period using base-case response definition were: $1705.64 per ezetimibe response, $2054.26 per LDL-C goal achieved, and $2997.56 per switch to rosuvastatin. Sensitivity analyses showed no change in trend for ezetimibe response, but changes were observed for the latter parameters. CONCLUSION: There is benefit in assessing both response rates as well as LDL-C goal attainment when determining a cost-analysis of ezetimibe add-on therapy to simvastatin.
intervention measures for LDL, HDL, triglycerides, total cholesterol, adherence and quality-of-life. A random-effects meta-analysis combined data between pharmacist-intervention and standard-care groups. Chi-square tested heterogeneity of effects. Publication bias was assessed using funnel plots and Begg-Mazumdar statistic. RESULTS: Fifty-one studies were found; 22 met inclusion/exclusion criteria. Study settings included medical center (n = 11), community pharmacy (n = 8), hospital (n = 2) and patient homes (n = 1). Patient education (77%) and medication management (73%) were most common interventions. The average patient follow-up period was 9.8 ± 6.4 months. Quality of pharmacist-intervention studies was considered “fair” (65%, SD = 6.6%). Total cholesterol was significantly reduced from baseline (34.3 ± 10.3 mg/dL, p < 0.001) and also significantly above control groups (22.0 ± 10.4 mg/dL, p = 0.034). LDL was reduced significantly from baseline (38.6 ± 12.4 mg/dL, p = 0.002); but not significantly more than controls (22.1 ± 12.0 mg/dL, p = 0.065). A clinically relevant but not statistically significant reduction in triglycerides was found. Patients’ adherence to pharmacotherapeutic regimens (35%) studies reported significant results after pharmacists’ interventions and quality of life (2/2 significant) were considered possibly not sensitive and possibly sensitive to pharmacist interventions, respectively. CONCLUSION: Total cholesterol is sensitive to pharmacist’s interventions while LDL and triglycerides levels are possibly sensitive to those interventions. Further research should evaluate specific determinants of pharmacist-sensitive outcomes.

PCV6

ROLE OF OSTEOPROTEGERIN AND RANKL IN BONE AND VASCULAR CALCIFICATION
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OBJECTIVE: New members of the TNF-signaling superfamily, osteoprotegerin (OPG) and receptor activator of nuclear factor-kB ligand (RANKL), are thought to play an important role in vascular calcification and bone remodeling and might represent the molecular link between arterial calcification and bone resorption. The purpose of this study was to determine whether OPG and/or RANKL mediate the observed association between coronary and bone calcification in postmenopausal women.

METHODS: Among the members of the Rancho Bernardo longitudinal study, 92 postmenopausal women (aged 58–81 years) taking estrogen therapy (ET) who underwent assessment of bone mineral density (BMD) and coronary artery calcification (CAC) and had serum OPG and RANKL levels measured between 1998–2002 are the basis of this report. RESULTS: Neither OPG nor RANKL levels varied among subjects with and without CAC in multivariate analysis. Increase in BMD at the hip was associated with decrease in CAC (OR = 0.52; 95% CI: 0.29–0.93) independent of age, fat-free mass, HDL cholesterol, current smoking, and use of cholesterol-lowering medications. Other skeletal sites demonstrated a similar pattern. Addition of RANKL and/or OPG in the model had minimal effect on the magnitude or statistical significance of the BMD–CAC association. Additionally, a test of interaction indicated that RANKL and OPG are not significant effect modifiers of the association. CONCLUSION: Serum OPG and RANKL do not account for the observed association between bone and coronary artery calcification among postmenopausal women using ET.

PCV7

RISK OF HOSPITALIZATION ASSOCIATED WITH BETA-BLOCKER THERAPY IN PATIENTS OF CHRONIC HEART FAILURE AND DIABETES: A MEDICAID STUDY
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OBJECTIVE: Beta-blocker therapy, well established in the treatment of CHF, is considered contraindicated in patients with concomitant diabetes by many physicians due to concerns of increased incidence of hypoglycemia, worsening dyslipidemia, and decreased insulin sensitivity. Purpose of this study is to determine the association between beta-blocker therapy and hospitalization in patients with chronic heart failure (CHF) and diabetes.

METHODS: The study was a retrospective analysis utilizing the pharmacy, inpatient and outpatient claims linked with eligibility files for persons enrolled in the Georgia Medicaid benefits through the year 2001. Patients who received either diagnosis of chronic heart failure and diabetes were identified. The study cohort was further categorized into treatment and comparison groups according to their exposure to beta-blocker. A stepwise logistic regression analysis was employed to assess the association between taking beta-blocker and hospitalization among CHF patients with diabetes.

RESULTS: Three hundred ninety patients with beta-blocker exposure and 642 not-exposed patients were identified. Two hundred thirty eight patients were hospitalized and 799 had no hospitalization. Majority of the cohort was female 788 (76.36%), black 531 (51.45%) and in the age group of 40–65 years 966 (93.60%). Metoprolol was the most commonly used beta-blocker with 12,149 claims (51.83%) followed by Carvedilol 6169 (26.32%). The most common co-morbid conditions among patients were found to be Hypertension, Ischemic Heart Disease and Chronic Obstructive Pulmonary Disease. Diuretics, ACE inhibitors and D'oxin use were found to be the common concurrent therapy taken by the patients. After controlling for factors like age, race, gender, common co-medications and co-morbid conditions, there was no significant association between hospitalization and beta-blockers use in patients with Chronic Heart Failure and Diabetes.

CONCLUSION: Despite the potential contraindication, the utilization of beta-blocker does not lead to a higher rate of hospitalization among CHF patients with diabetes.

PCV8

BLOOD PRESSURE SUCCESS ZONE LONGITUDINAL STUDY OF SUCCESS (BPSZ-BLISS), AN OBSERVATIONAL MULTI-CENTER STUDY OF THE IMPACT OF THE BPSZ EDUCATIONAL PROGRAM ON BLOOD PRESSURE CONTROL, PERSISTENCE, COMPLIANCE, AND TREATMENT SATISFACTION. ENROLLMENT METRICS AND BASELINE COHORT CHARACTERISTICS
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OBJECTIVE: The Blood Pressure Success Zone (BPSZ) Program is a nationwide initiative which provides blood pressure management education to hypertensive patients and a complimentary trial of antihypertensive medications. The BPSZ-BLISS (Longitudinal Observational Study of Success) is an observational study to evaluate BPSZ program effectiveness on blood pressure (BP) control, compliance, persistence and treatment satisfaction.