for designing CER studies projects. The expert working group ranked technologies according to suitability for both CED and the guideline projects. The top 3 technologies that emerged for CED were 1) pharmacogenetic guidance of warfarin dosing; 2) catheter ablation for atrial fibrillation; and 3) percutaneous aortic valve replacement. For the guideline projects, the ranking was 1) C-reactive protein testing for heart disease; and 3) bioabsorbable stents. CONCLUSIONS: A prospectively developed multi-step process focusing on technologies within a disease area may improve the process of prioritizing technologies for CER, offering more direct guidance to researchers and policy makers. Namely, CMTM is initiating a CED project and the advisory workgroup selected the warfarin dosing topic, indicating the success of the process in choosing a relevant technology.

PCV137

ANALYSIS OF HEALTH CARE OUTCOME FOR CONGESTIVE HEART FAILURE (CHF) PATIENTS

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OBJECTIVES: To analyze the difference of in-stay hospitalization frequency between Congestive Heart Failure (CHF) patients who are on the recommended medication and those who are not. METHODS: We used the inpatient, outpatient and medication files from the Thomson Reuters MarketScan data records of 2000 and 2001. First, we extract patients with CHF from the inpatient and outpatient files using ICD9 codes. Next, we extract those patients from the medication files. Depending on the NYHA classification, there is a recommended combination of medication a CHF patient should have. We use these medications to divide the patients into two groups. Then, we analyze the data using logistic regression, kernel density estimation and ANOVA. The preprocessing and the statistical analysis are done using SAS software. RESULTS: The analysis yields a statistically noteworthy difference in proportions of number of in-stay hospitalizations between people on the recommended treatment and those who are not. This difference is significant in length of stay for the two groups. CONCLUSIONS: Being on the recommended combination of medication has a significant impact on the health care outcome for CHF patients.

PCV138

ASSESSING THE IMPACT OF AN EMPLOYER SPONSORED COMMUNITY PHARMACY BASED MTM PROGRAM ON CLINICAL OUTCOMES FOR PATIENTS WITH DIABETES AND HYPERTENSION

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OBJECTIVES: To examine the effect of an employer sponsored, pharmacist-provided medication therapy management program (MTM) on clinical outcomes and process measures in patients with diabetes and hypertension. METHODS: A prospective, intent-to-treat, pre-post longitudinal study. Patients were Lucas County employees and dependents with diabetes, hypertension, or both. The MTM services were provided by independent pharmacists in Northwest Ohio at seven sites. ADA and JNC-VII guidelines were used to design interventions and set patient goals. Data was analyzed using SPSS v.17.0 for three groups—hypertension only, diabetes only, and diabetics. Wilcoxon signed-rank test was used to compare 2 time points and the Friedman test was used to compare readings at baseline, 6, 12, and 18 months. RESULTS: Five hundred eighty six patients enrolled at baseline. The Hypertension only group mean systolic blood pressure (SBP) improved from 135.37 ± 18.85 to 130.33 ± 16.35 (p = 0.037). Diastolic blood pressure (DBP) improved from 81.71 ± 10.24 to 79.52 ± 12.08 (p = 0.386). Uncontrolled hypertensive patients’ SBP improved from 153.03 ± 12.27 to 138.91 ± 19.74 (p = 0.01). DBP improved from 97.07 ± 5.71 to 85.6 ± 13.20 (p < 0.05). For hypertensive diabetic patients SBP improved from 134.59 ± 18.99 to 128.35 ± 18.35 (p = 0.20). DBP improved from 81.52 ± 11.25 to 79.52 ± 12.08 (p = 0.73). Uncontrolled diabetic hypertensive patients’ SBP mean improved from 145.96 ± 19.74 to 130.33 ± 16.35 (p < 0.001). DBP improved from 97.07 ± 5.71 to 85.6 ± 13.20 (p = 0.037). For hypertensive diabetic patients A1c improved significantly from 8.02 ± 1.31 to 7.41 ± 0.99 (p < 0.001). Patients with controlled A1c at baseline were able to maintain control for the 18 months of participation in the study. Upon being advised by their pharmacists more patients visited their dentist, podiatrist, and ophthalmologist. CONCLUSIONS: Pharmacists were able to help patients maintain A1c and BP goals thereby preventing future complications and costs to the employer.

PCV139

EVALUATION OF A HEALTH CARE PROVIDER INTERVENTION TO INITIATE ACEI OR ARB THERAPY AMONG PATIENTS WITH DIABETES PLUS HYPERTENSION AND/OR NEPHROPATHY

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OBJECTIVES: ACEI or ARB therapy in patients with diabetes has been shown to delay progression to renal failure. This study evaluated the impact of a mailing intervention to health care providers aimed at optimizing ACEI or ARB therapy in patients with diabetes plus hypertension and/or nephropathy. METHODS: A retrospective cohort study was performed using pharmacy claims data from a large Medicare Part D plan to evaluate an intervention notifying providers of missing ACEI/ARB therapy for 28,348 patients with diabetes plus hypertension and/or nephropathy not qualifying for Medication Therapy Management services (Non-MTM). A control cohort of 50,757 Non-MTM Medicare Part D patients with diabetes plus hypertension and/or nephropathy not receiving ACEI or ARB therapy during the 7-month identification period was selected from an earlier timeframe to be compared to the intervention cohort. The primary outcome was the percentage of identified patients initiating ACEI or ARB therapy during the post-intervention period. This was performed using a dependent variable of initiation vs. no initiation of ACEI or ARB therapy in the post-intervention period. Independent variables included age, gender, chronic disease score, and hypertension and nephropathy diagnoses. RESULTS: During the post-intervention period the analysis showed a 15.0% increase of the intervention group compared to 12.2% for the control group (p < 0.0001). After adjusting for baseline characteristics, intervention patients had greater odds of initiating ACEI or ARB therapy compared to control patients (OR 1.40; 95% CI 1.33–1.48). A limitation of this analysis is that the identification and measurement periods for the control group were in a different part of the year than the intervention cohort. CONCLUSIONS: Intervention in patients with diabetes plus hypertension and/or nephropathy via health care providers demonstrated an increased likelihood of initiation of ACEI or ARB therapy compared to a control group.

PCV140

UNDERSTANDING THE CURRENT LIPID PROFILE, TREATMENT, AND CASE MIX OF PATIENTS WITH DYSLIPIDEMIA IN A REAL-WORLD POPULATION

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OBJECTIVES: In addition to elevated low-density lipoprotein cholesterol (LDL-C), studies have implicated decreased high-density lipoprotein cholesterol (HDL-C) and elevated triglycerides (TG) as independent modifiable risk factors for cardiovascular disease. This study determined the proportion of patients with a single lipid abnormality (SLA) versus mixed dyslipidemia and their respective treatments among a large sample of managed care patients. METHODS: A retrospective cohort study of adults with a complete lipid panel between 1/1/2005 and 12/31/2008 in a US national health plan with >10 million commercial and Medicare Advantage members was conducted. SLA was defined as one of the following: high LDL-C based on NCEP ATP III guidelines, low HDL-C (<40 mg/dL), or high TG (≥200 mg/dL). Mixed dyslipidemia was defined as having ≥2 of the lipid abnormalities. Proportion of patients with an SLA or mixed dyslipidemia and lipid-modifying therapy patterns were evaluated. RESULTS: A total of 247,322 patients had dyslipidemia in the 4-year observation period; 68% had an SLA and 32% had mixed dyslipidemia. Of patients with SLA, 47% had elevated LDL-C, 32% had low HDL-C, and 21% had elevated TG. For patients with an SLA, only 28% received lipid-modifying therapy, with 71% of those receiving statin monotherapy. Of patients with mixed dyslipidemia, 42% had low HDL-C and high TG, 22% had high LDL-C and low HDL-C, 21% had high LDL-C and high TG, and 13% had all 3 abnormal lipid parameters. In the mixed dyslipidemia group, only 33% received lipid-modifying therapy, with 58% of those receiving statin monotherapy and 19% receiving multi-pill combination therapy. CONCLUSIONS: The lack of treatment and inadequate treatment observed in this real-world study indicates an unmet medical need in managing lipid levels among dyslipidemic patients, including patients with mixed dyslipidemia.

PCV141

UTILIZATION AND EXPENDITURE TRENDS FOR BOTH ANGIOTENSIN CONVERTING ENZYME INHIBITORS AND ANGIOTENSIN RECEPTOR BLOCKERS IN THE MEDICAID PROGRAM

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OBJECTIVES: Both angiotensin-converting-enzyme inhibitors (ACEIs) and angiotensin receptor blockers (ARBs) have been widely used for treatment of hypertension, heart failure, diabetes mellitus and kidney disease. The purposes of this study were to describe the utilization, price and expenditure trends of ACEIs and ARBs and to assess market-share competition between ACEIs and ARBs. METHODS: A retrospective, descriptive time-series analysis was performed using the National Pharmaceutical claims database from 1991 to 2008. The quarterly prescription numbers and reimbursement amounts were calculated over time by summing data for individual drug products. The quarterly per-prescription reimbursement was used as a proxy for drug price. The market-share competition between ACEIs and ARBs was calculated based on both prescription numbers and Medicaid payments. RESULTS: The ACEI prescriptions increased from 4.8 million in 1991 to 16.5 million in 2004, then dropped to 2.3 million in 2008. Meanwhile, ARB prescriptions increased from 0.3 million in 1991 to 7.5 million in 2004, then dropped to 2.1 million in 2008. Concurrently, annual expenditure for ACEIs increased from $179 million in 1991 to $593 million in 2002, and dropped to $64 million in 2008. Expenditure for ARBs increased from $1.3 million in 1991 to $515 million in 2005, and dropped to $174 million in 2008. Market shares for generic ACEIs like captopril, benazepril and enalapril increased rapidly. All brand-name prices for ARBs and ACEIs increased over time regardless of new branded or generic drug entry, while generic prices decreased over time. CONCLUSIONS: Dramatically increased utilization of both ACEIs and ARBs may have been due to their widespread use in clinical practice, efficacy and their utilization from 2006–2008 was related to the introduction of Medicare Part D. Increased utilization of generic ACEIs was likely due to the Medicaid generic substitution policy and changes in prescribing patterns.