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 guidelines, the ranking was 1) C-reactive protein testing for heart disease; and 3) biosorbable 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. Notably, CMTP 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 use 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 these 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 AdaBoost. 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. There is a significant difference 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 (MTP) 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 MTP 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 v17.0 for three groups—hypertension only, diabetes only, and diabetes, hypertension. 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 ± 18.35 (p = 0.037). Diastolic blood pressure (DBP) improved from 81.71 ± 10.68 to 79.92 ± 10.32 (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 ± 13.83 to 135.29 ± 17.62 (p = 0.035). DBP improved from 87.51 ± 6.54 to 82.71 ± 11.92 (p = 0.439). For uncontrolled 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 mellitus and kidney 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. Results were compared between those receiving ACEI or ARB therapy plus 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 low HDL-C and low HDL-C, 21% had high HDL-C and high TG, and 13% had all 3 abnormal lipid parameters. In the mixed dyslipidemia group, 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.

**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. Results were compared between those receiving ACEI or ARB therapy plus 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 low HDL-C and low HDL-C, 21% had high HDL-C and high TG, and 13% had all 3 abnormal lipid parameters. In the mixed dyslipidemia group, 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 a proxy for drug price was computed for all brands and generic ACEIs and ARBs. The market share of 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 1.93 million in 1995 to 1.6 million in 2004, then dropped to 0.7 million in 2008. Concurrently, annual expenditure for ACEIs increased from $179 million in 1991 to $593 million in 2002, and dropped to $54 million in 2008. Expenditure for ARBs increased from $1.3 million in 1995 to $151 million in 2005, and dropped to $74 million in 2008. Market shares for generic ACEIs like captopril, however, 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 contributed to the increased expenditure. 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.