mental scores or work productivity. Greater increases in pharmacy costs for the DTM cohort were partially offset by smaller increases in medical costs, resulting in similar total health care costs for DTM patients compared with controls.

### ME2

**THE EFFECT OF MEDICARE PART D PRESCRIPTION DRUG COVERAGE GAP ON MEDICATION ADHERENCE**

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**OBJECTIVES:** To investigate the impact on medication adherence for patients with common chronic conditions who reach the Medicare Part D coverage gap versus those who do not. The study is unique because it included characteristics of Medicare Part-D enrollees that are not typically available in administrative databases. METHODS: A survey based on the Seniors’ Prescription Coverage, Use and Spending Survey and the Brief Medication Questionnaire was distributed to elderly persons seeking care at the pharmacies within the University of Arkansas for Medical Sciences Advanced Practice Newborn Family Medicine Clinic.

**RESULTS:** A total of 152 subjects (62% female, 44.1% greater than 75 years of age, and 92.7% white) completed the survey. A total of 44.7% reached coverage gap in 2007 or 2008 and 31.6% reported non-adherent. 45.4% had monthly income of $3000 or less; 2.2% had no college education. Subjects in the coverage gap were twice as likely to be non-adherent to medication regimens as compared to those not in the gap (adjusted odds ratio = 2.07, p-value = 0.051). **CONCLUSIONS:** There is likely significant impact of filling in the coverage gap on medication adherence for the elderly, which may have adverse health consequences. Decision makers ought to be cognizant of these implications.

### ME3

**IMPACT OF COST SHARING ON TREATMENT AUGMENTATION IN PATIENTS WITH DEPRESSION**

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**OBJECTIVES:** Patients with depression may not respond to first-line antidepressant (AD) therapy. Treatment options include changing from one AD to another and augmenting AD treatment with another concurrent AD. A stimulant, mood stabilizer; or a second generation antipsychotic (SGA). While treatment decisions are primarily based on clinical considerations, they may also be influenced by patient cost-sharing. This study examines the relationship between cost-sharing and the use of augmentation among depressed patients who are already filling prescriptions for AD treatment.

**METHODS:** Patients aged 18-64 in employer-sponsored plans with a diagnosis of depression and at least one antidepressant prescription were found in the 2004-2008 MarketScan Database. Twelve months of continuous medical and prescription coverage were required before and after the initial antidepressant prescription. Patients with certain psychiatric diagnoses (e.g., schizophrenia) were excluded, resulting in a sample of 48,865 patients. Logistic regression models estimated the probability of augmentation within 12 months as a function of a plan-level cost-sharing index for brand and generic antidepressants and augmentation medications, controlling for demographics and clinical characteristics. Results are reported as odds ratios (OR) and 95% confidence intervals (CI). **RESULTS:** A $10 increase in the cost-sharing index for antidepressants was associated with a 3% decrease in the odds of any augmentation (OR 0.947, 95% CI: 0.916-0.979, N=48,795). A $10 increase in the cost-sharing index for antidepressants was associated with a 6% decrease in the odds of augmentation with a second antidepressant (OR 0.939, 95% CI: 0.902-0.977, N=47,269). **CONCLUSIONS:** Prescription drug cost-sharing appears to influence the decision to augment AD treatment. Financial barriers may prevent patients from receiving additional care.

### ME4

**THE IMPACT OF MEDICARE PART D ON HEALTH CARE UTILIZATION AND HEALTH OF THE MEDICARE BENEFICIARIES**

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**OBJECTIVES:** To examine, using nationally representative data, the impact of Medicare Part D on out-of-pocket-costs, emergency room visits, hospitalization, and general health among Medicare beneficiaries aged 65 or older in 2005. Based on the FE model, as estimated. As a result of the increased cost-sharing index for all $10 increase in the cost-sharing index for all ACEIs, the adjusted hazards ratio from three different PS-weighted Cox models were 1.003 (95% CI: 0.739–1.445) for enalapril, 0.68–2.60), or overall health (β = –0.0037, 95% CI: –0.0210–0.0096) among Medicare beneficiaries compared to controls. **CONCLUSIONS:** In the first year following the implementation of Medicare Part D, out-of-pocket costs for.reading medical charges were reduced among Medicare beneficiaries. However, Medicare Part D was not associated with improved health outcomes of Medicare beneficiaries as measured by reductions in emergency room visits and hospitalization and improvement in their health utility score. Further research should follow Medicare beneficiaries for a longer period of time after its implementation or focus on beneficiaries with diseases that might be more sensitive to Medicare Part D.

### SB1

**EXPENDITURE OF DISEASE MODIFYING ANTI-RHEUMATOID TREATMENT—LAGGED TREATMENTS AS INSTRUMENTAL VARIABLES IN PANEL DATA**

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**OBJECTIVES:** To compare the incremental medical expenditure associated with alternative disease modifying anti-rheumatoid drug (DMARDs) choices in Rheumatoid Arthritis (RA). METHODS: Retrospective cohorts were constructed from California Medicare claims. Subjects in the coverage gap were twice as likely to be non-adherent to medication regimens as compared to those not in the gap (adjusted odds ratio = 2.07, p-value = 0.051). **CONCLUSIONS:** There is likely significant impact of filling in the coverage gap on medication adherence for the elderly, which may have adverse health consequences. Decision makers ought to be cognizant of these implications.

**RESULTS:** A $10 increase in the cost-sharing index for all ACEIs, the adjusted hazards ratio from three different PS-weighted Cox models were 1.003 (95% CI: 0.739–1.445) for enalapril, 0.68–2.60), or overall health (β = –0.0037, 95% CI: –0.0210–0.0096) among Medicare beneficiaries compared to controls. **CONCLUSIONS:** In the first year following the implementation of Medicare Part D, out-of-pocket costs for.reading medical charges were reduced among Medicare beneficiaries. However, Medicare Part D was not associated with improved health outcomes of Medicare beneficiaries as measured by reductions in emergency room visits and hospitalization and improvement in their health utility score. Further research should follow Medicare beneficiaries for a longer period of time after its implementation or focus on beneficiaries with diseases that might be more sensitive to Medicare Part D.

### SB2

**COMPARING BINARY PROPENSITY SCORE ANALYSIS WITH MULTIPLE PROPENSITY SCORE APPROACH AMONG PATIENTS WITH CHRONIC HEART FAILURE**

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**OBJECTIVES:** Propensity scores (PS) are often used with the binary treatments. However, in day to day practice multiple treatment settings are experienced rather than binary treatments. Therefore extension of binary PS analysis to multiple PS will add to the empirical knowledge of use of PS. We compared binary PS analysis with multiple PS approach by examining clinical effectiveness in patients with Chronic Heart Failure (CHF). METHODS: The study was a retrospective analysis of a national cohort of patients diagnosed with CHF identified from the Department of Veterans Affairs electronic medical records system. PS analysis (binary and multiple) was used to balance 47 baseline patient characteristics among the different Angiotensin Converting Enzyme Inhibitors (ACEIs). For multiple PS we split our cohort into separate models. Effect of different ACEIs on time to death was assessed using a multiple PS weighted Cox proportional hazard model and three separate binary PS weighted Cox proportional hazard models. Captoril was used as reference in all models. The statistical significance of mortality was captured in terms of multiple PS approach. RESULTS: For binary propensity approach the adjusted hazards ratio from three different PS-weighted Cox models were 1.003 (95% CI: 0.724–1.390) for enalapril, 0.740 (95% CI: 0.688–0.798) for fosinopril and 0.823 (95% CI: 0.726–0.931) for trandolapril compared with captoril. For multiple propensity approach the adjusted hazards ratio were 1.033 (95% CI: 0.739–1.445) for enalapril, 0.738 (95% CI: 0.685–0.798) for fosinopril, and 0.819 (95% CI: 0.767–0.875) for lisinopril. **CONCLUSIONS:** We found the 2 propensity approaches produced similar