prior to and following the switch both in the intervention and the control groups.

CONCLUSIONS: The switch to a generic substitute in the case of rosiglitazone led to a reduction in health care costs, without affecting patients’ health.

PDB59 THE COMPLEXITY OF DRUG THERAPY AND SOCIO-ECONOMIC VARIANTS IN PATIENTS WITH DIABETES
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OBJECTIVES: Diabetes affects more than 23 million Americans. Despite the importance of drug therapy, little is known about the level of the complexity of drug therapy and its socio-economic variants in patients with diabetes. METHODS: we analyzed 2,189 adult patients with diabetes aged 18-85 using a nationally representative sample in Medical Expenditure Panel Survey (MEPS) in 2007, which was linked with the prescription medication claim files. Generalized linear models (GLMs) were used to fit the distribution of drug complexations and socio-economic variants in drug spending, controlling for age, gender, race, geographic regions, marital status, general health perception, and 8 comorbidity conditions. All analyses were weighted to reflect the complex sample design in MEPS. RESULTS: The 2,189 adult diabetes patients represented 17.5 million diabetes patients and a total of $79.5 billion spending on prescription drugs by diabetes patients in the US in 2007. On average, a diabetes patient had 46 prescriptions, for a total of $4,235 of total drug spending and $1,323 out-of-pocket spending. The top 5 leading drug classes included antihyperlipidemic (13.4% of total drug spending), analgesics (4.4%), and proton pump inhibitors (3.8%), ACE-inhibitors (3.7%), and antidepressants (3.2%). On average, a diabetes patient used 3.52 (SD 1.76) classes of drugs within the 10 drug classes with the highest spending. In multivariate regression analysis, complexations were associated with different levels of cost-sharing.

PDB60 EFFECT OF MEDICARE PART D COVERAGE GAP ON MEDICATION CONSUMPTION BEHAVIORS: CASE OF ORAL ANTI-DIABETIC MEDICATIONS
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OBJECTIVES: Few studies have examined the effects of the Medicare Part D coverage gap on medication consumption behaviors for diabetic patients. Diabetes accounts for 32% of the Medicare expenditure and 20% of the Medicare beneficiaries suffer from diabetes. The current study examined how entering the coverage gap in 2007 affected medication adherence rates, medication consumption behavior and resource utilization among Medicare Part D beneficiaries taking oral anti-diabetic medications with different levels of cost-sharing. METHODS: The study used a longitudinal, retrospective pre-post cohort design with a 5% national random sample of Medicare enrollees. Beneficiaries on oral anti-diabetic medications entering the coverage gap were matched on the basis of utilization patterns in prescription drug coverage. Utilization measures were derived from inpatient, outpatient and carrier claims for these beneficiaries. Adherence was measured as proportion of days covered (PDC). RESULTS: A total of 60.1 % of the beneficiaries entered the coverage gap and 20.3% reached catastrophic coverage. The number of patients who discontinued medications after entering the gap was associated with level of cost sharing (31.1% (full copayment), 20-27% (partial copayment), 14.0% (no copayment), p < 0.001). 2.0 % of the beneficiaries switched medications after entering the coverage gap. However no association of switching medications with cost sharing was observed. CONCLUSIONS: The current study examined how entering the coverage gap in 2007 affected medication adherence rates, medication consumption behavior and resource utilization among Medicare Part D beneficiaries taking oral anti-diabetic medications with different levels of cost-sharing. METHODS: The study used a longitudinal, retrospective pre-post cohort design with a 5% national random sample of Medicare enrollees. Beneficiaries on oral anti-diabetic medications entering the coverage gap were matched on the basis of utilization patterns in prescription drug coverage. Utilization measures were derived from inpatient, outpatient and carrier claims for these beneficiaries. Adherence was measured as proportion of days covered (PDC). RESULTS: A total of 60.1 % of the beneficiaries entered the coverage gap and 20.3% reached catastrophic coverage. The number of patients who discontinued medications after entering the gap was associated with level of cost sharing (31.1% (full copayment), 20-27% (partial copayment), 14.0% (no copayment), p < 0.001). 2.0 % of the beneficiaries switched medications after entering the coverage gap. However no association of switching medications with cost sharing was observed. CONCLUSIONS: The current study examined how entering the coverage gap in 2007 affected medication adherence rates, medication consumption behavior and resource utilization among Medicare Part D beneficiaries taking oral anti-diabetic medications with different levels of cost-sharing.

PDB61 DECOMPOSING GENDER DIFFERENCES IN ANGIOTENSIN II CONVERTING ENZYME INHIBITORS AND ANGIOTENSIN RECEPTOR BLOCKERS AMONG VETERANS WITH DIABETES
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OBJECTIVES: The objective of the study is to identify and measure the extent to which gender differences in Angiotensin II Converting Enzyme Inhibitors (ACE) and Angiotensin Receptor Blockers (ARB) prescriptions could be explained by demographic, socio-economic and health status factors. METHODS: Secondary data analyses of merged Veteran Health Administration (VHA) and Medicare claims data from 1996 through 2006. Diabetes was identified with International Classification of Diseases, 9th edition (ICD-9-CM) codes from inpatient or outpatient physician visits over the 24 month period. The independent variables were demographics, socio-economic characteristics, physical health and mental health conditions. Based on the parameter estimates and distribution of individual characteristics, we performed traditional and extended decomposition techniques to analyze the drivers behind the gender differences in lipid control. Population Studied: The final study sample consisted of 263,730 veterans who had an index creatinine value in FY1999, and qualifying creatinine value between 90 and 385 days following. There were 5,458 women and 258,272 men veterans. RESULTS: Overall, more men (58.1%) than women (51.3%) were prescribed ACEI/ARBs. Even after controlling for many observable characteristics, women were less likely to have ACEI/ARB prescriptions. The adjusted odds ratio was 0.82 with 95% CI = 0.77, 0.87. Nearly one third of the 7 percentage point gap in prescription drug use could be explained by variables included in the model. The gender gap in ACEI/ARBs could be explained by differences in indications for ACEI/ARB, diabetes severity, and mental illness (depression, anxiety, and PTSD). CONCLUSIONS: Gender differences in ACEI/ARB exist and only about one-third of the differences can be explained by differences in patient characteristics. Mental health conditions may be a barrier to lower ACEI/ARB rates among women. Our findings highlight the importance of patient health approach to medication use in terms of coordinated care for mental illness and physical illnesses.

PDB62 RELATIONSHIP BETWEEN SOCIAL AND ECONOMIC FACTORS AND ANTIDIABETIC MEDICATION PRESCRIBING PATTERNS
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OBJECTIVES: The decision to prescribe medication to newly diagnosed type 2 diabetic patients is influenced by subjective and objective factors including patients’ economic and social status. This study examines the relationship between social and economic indicators and incident antidepressant medication (ADM) prescribing patterns during 2005-2007. METHODS: A retrospective cohort study of newly diagnosed patients with type 2 diabetes from the 2007-2009 Kentucky Medicaid population. Subjects were included if they had two diabetes-related non-complicated claims with no claims prior to 2007 in the provider-claims file. Patients were stratified into those following a diabetes-related ADM regimen within 90 days of diagnosis and those not following any medication within that time frame. We evaluated the effect of social and economic factors on the pattern of prescribing. Mapping techniques were used to illustrate county/regional ecological differences. RESULTS: Patients dispensed an ADM were significantly younger than those not dispensed a medication (43y vs 51y, p < 0.001). If patients were given an ADM, they were more likely prescribed metformin in the Appalachian and western rural counties compared with metropol-itan counties (39% vs. 32%; P = 0.044). Patients in urban counties were more often dispensed metformin or two or more ADMs (45% vs. 39%; P = 0.031) if they were not prescribed an ADM. Our findings highlight the importance of the initial medication in preventing type 2 diabetes severity at first presentation.

PDB63 GEOGRAPHIC VARIATION IN DRUG SPENDING AND ADHERENCE PATTERNS FOR MEDICARE BENEFICIARIES WITH DIABETES
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OBJECTIVES: Regional variation in healthcare spending is a long standing topic of interest. We used Medicare data to examine the opportunity to examine this relationship with respect to drug spending and adherence. Our objective is to determine if beneficiaries residing in regions characterized by high Part D drug spending exhibit higher levels of utilization and adherence to medications recommended in diabetes treatment guidelines. METHODS: We tracked a random 5% sample of Medicare Part D enrollees diagnosed with diabetes in 2006 and 2007 (N = 236,321). Measures included averages for Part D spending, any use, duration of therapy (DOT), and medication possession ratio (MPR) for oral antidiabetic agents, ACE-inhibitors/ARBs, and antihyperlipidemic agents. We aggregated individual values into metropolitan statistical areas (360) and rest-of-state areas (48) and arrayed mean regional measures by deciles. We estimated logistic and OLS regression models controlling for age, sex, comorbidity counts, total drug spending, and decile ranking of drug spending in each beneficiary’s region of residence. RESULTS: Part D drug spending varied by a factor of 1.89 between the lowest ($2,613) and highest ($4,952) spending deciles. After regression adjustments, the ratio fell to 1.49. We found little geographic variation in prevalence of use and MPR. However, DOT was roughly one month longer in each drug class in the top compared to the bottom decile (p < 0.001) in unadjusted comparisons. After adjustment, differences in DOT range from 11-18 days longer for beneficiaries in the top spending decile (p < 0.001). CONCLUSIONS: We found considerable geographic variation in Part D drug spending. Almost half of the difference between the top and bottom spending areas could be attributed to differences in beneficiary age, sex, and comorbidities. There were no significant regional differences in user rates or MPR, but DOT for all three drug classes was significantly longer in high spending areas.

PDB64 EVALUATION OF THE BURDEN OF ILLNESS OF TYPE-2 DIABETES MELLITUS IN A MEDICARE POPULATION
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OBJECTIVES: To evaluate the direct healthcare costs of type 2 diabetes (T2DM) among older patients enrolled in Medicare Advantage plus prescription drug plan.