

dent pharmacies in Texas to 24,576 dual eligible patients. Percent gross margin was compared between Medicaid and Medicare Part D claims as well as among several popular Prescription Drug Plan (PDP) sponsor claims. **RESULTS:** The mean percent gross margin for prescriptions dispensed before Part D (Medicaid claims) was 26.7%. The mean percent gross margin for claims dispensed after Part D (Medicare claims) was 17.0% (using ingredient costs in 2006 dollars) or 20.4% (using ingredient costs adjusted to 2005 dollars), a reduction of 36.3% and 23.6%, respectively. Among the five PDP sponsors identified as having the greatest number of claims in the sample, the mean percent gross margin ranged from 12.0% to 19.8%. Regression analysis confirmed that the PDP sponsor, in addition to the proportion of generic drugs dispensed, is a significant predictor of a pharmacy's overall percent gross margin. **CONCLUSION:** These findings support pharmacy assertions of lower reimbursements from Medicare Part D payers compared with Medicaid payers. Based on these findings, pharmacies can respond to this new environment by accepting Part D plans with higher average percent gross margins and increasing the proportion of generic drugs dispensed to Medicare beneficiaries.

MD3

IMPACT OF MEDICARE PART D DOUGHNUT HOLE ON THE USE OF MEDICATIONS BY THERAPEUTIC CLASSES FOR STANDARD BENEFICIARIES

Sun SX, Lee KY

Walgreens Health Services, Deerfield, IL, USA

OBJECTIVE: The standard Medicare Part D benefit includes a "doughnut hole" in coverage. Standard benefit beneficiaries who fall into this gap are responsible for the total costs of their prescription drugs. The objective of this study was to evaluate the impact of doughnut hole on the use of medications by therapeutic classes. **METHODS:** A difference-in-difference (DID) study approach was used. De-identified data from January 1, 2006 to December 31, 2006 were obtained from a pharmacy benefit management database. The study group included standard benefit beneficiaries who reached the doughnut hole in a time period from June 1 to October 31, 2006. The control group included beneficiaries enrolled in commercial prescription drug plans without coverage gaps. Changes in prescription days per month, out-of-pocket costs per month, and generic utilization rates by therapeutic classes were targeted outcome measures. **RESULTS:** After controlling for demographics, disease conditions and secular trend of drug use, the Part D doughnut hole was found to be associated with reductions in use of antiasthmatics (-3.08 prescription days per month, $p < 0.0001$), antineoplastics (-2.70, $p < 0.0001$), antipsychotics (-1.77, $p = 0.0630$), anti-diabetic drugs (-1.63, $p = 0.0010$), anticonvulsants (-1.49, $p = 0.0042$), antidepressants (-1.11, $p = 0.0011$), antihyperlipidemics (-1.09, $p < 0.0001$), but slight increase in use of antivirals (0.08, $p = 0.9011$) and opioid analgesics (0.05, $p = 0.8503$). The Part D doughnut hole was also associated with significant increases in the average out-of-pocket costs for all therapeutic classes and increases in generic utilization rates for all classes except opioid analgesics. **CONCLUSION:** Standard Part D beneficiaries in the doughnut hole significantly reduced use of medications for potentially disabling and life-threatening conditions, but increased spending on medications for potentially less life-threatening conditions. This raises concern for an increased risk of adverse health events.

MD4

IMPACT OF THE MEDICARE MODERNIZATION ACT OF 2003 ON PART B DRUG USE AND SPENDING: A CASE STUDY OF BIOLOGICALS FOR RHEUMATOID ARTHRITIS

Doshi JA, Li P, Puig A

University of Pennsylvania, Philadelphia, PA, USA

OBJECTIVE: To examine the changes in Medicare Part B drug utilization and expenditures associated with the reduction in physician reimbursement for Part B drugs between 2003 and 2005 and availability of drug alternatives through Medicare Part D in 2006. This study specifically focuses on Part B biologics for rheumatoid arthritis (RA) since they faced both these changes introduced by the Medicare Modernization Act (MMA) of 2003. **METHODS:** We used the 2002 to 2006 Medicare 5% files which contain fee-for-service claims and enrollment data for a 5% random sample of the Medicare population. We examined beneficiaries with an RA diagnosis (ICD-9-CM 714.xx) in each year. Infliximab, the only Part B covered RA biologic available pre-MMA, was identified using HCPCS codes. We tracked national trends in its prevalence of use, number of claims, and total payments (in 2004 dollars) across 2002 to 2006. Multivariate regressions with standard errors corrected for repeated observations were estimated. **RESULTS:** We identified 0.65 to 0.81 million RA patients in 2002 to 2006. The prevalence of infliximab use increased from 4.6% to 5.8% between 2002 and 2004 and then declined to 5.0% in 2005 and 5.2% in 2006 ($p < 0.05$). The number of infliximab claims per user increased from 2002 to 2004 ($p < 0.05$); however, there was no significant change across 2004 to 2006. As expected, the average payment per claim reduced by 10% from 2004 to 2005. As a result, total payments for infliximab declined from \$512 million in 2004 to \$459 million in 2005. Total payments per user reduced from \$12,443 in 2004 to \$11,194 in 2005 ($p < 0.05$). There was no significant difference in any payment measure between 2005 and 2006. Adjusted analyses confirmed these findings. **CONCLUSION:** Infliximab use and expenditures declined modestly after the introduction of the average sales price based reimbursement system in 2005. No changes were observed after the introduction of Medicare Part D in 2006.

MENTAL HEALTH OUTCOMES RESEARCH**MHI**

REAL WORLD ASSOCIATION BETWEEN ANTIPSYCHOTIC TREATMENT AND WEIGHT GAIN IN AN ADOLESCENT POPULATION

Ghate SR¹, Said Q², Rosenblatt LC³, Kim E³, Pikalov A⁴, Brixner D¹

¹The University of Utah College of Pharmacy, Salt Lake City, UT, USA,

²University of Arkansas for Medical Sciences, Little Rock, AR, USA,

³Bristol-Myers Squibb, Plainsboro, NJ, USA, ⁴Otsuka America

Pharmaceuticals, Rockville, MD, USA

OBJECTIVE: To examine the real world impact of antipsychotics on weight gain in adolescent patients (12-19 years) taking second-generation (SGA) or first-generation antipsychotics (FGA). **METHODS:** Naïve monotherapy patients receiving FGA's or SGA's between July 1999 and March 2006 were identified using the GE Centricity electronic medical record database; patients on clozapine or depot antipsychotics were excluded. Baseline Body Mass Index (BMI) recorded within ≤ 90 days prior and closest to index prescription date was compared with maximum BMI obtained during the follow-up period (at least 90 days to end of study period or monotherapy period). Multivariate linear and logistic regressions were conducted to estimate the magnitude of weight gain and odds of 5%, 10%, 15%, and 20% increase in BMI. To account for growth, BMI was normalized by calculating