

cans [54%] ($p < 0.05$). Similarly, in patients with asthma, we found that African American patients were 65% less likely to have the recommended medication possession rate of at least 80% [RR: 0.35, 95% CI: 0.15–0.81]. There were no significant patient differentials in controller medication adherence by race in patients with psoriasis.

PHP20

IMPACT OF POLYPHARMACY MEDICATION THERAPY MANAGEMENT PROGRAM (MTMP) ON DRUG EXPENDITURES IN MEDICARE PART D POPULATION

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OBJECTIVES: To assess the impact of polypharmacy intervention on drug cost in the Medicare Part D population. **METHODS:** This is a case-control study, based on 2006 Medicare Part D population. The case group contains cases which have received Polypharmacy interventions, whereas the control group contains cases which have not been intervened upon. Per member per month (PMPM) drug savings were calculated as the difference between the projected post-intervention drug cost of the case group and the actual post-intervention drug cost of the case group. The projected post-intervention drug cost is based on the pre-post intervention percent change in the PMPM drug cost of the control group. **RESULTS:** There were 6050 Polypharmacy cases, of which 3442 were intervened on. The remainder served as the control group. The actual post-intervention PMPM drug cost for the case group was \$611 and the projected post-intervention PMPM drug cost for the same group was \$663, a difference of \$52, representing \$52 PMPM drug cost savings. **CONCLUSION:** Polypharmacy MTMP may not only help improve therapeutic outcomes through improved medication use, but may also reduce overall health cost. The present study showed significant pharmacy savings as a result of Polypharmacy intervention. This study did not address medical cost savings due to the lack of longitudinal medical claim data. However it would not be unreasonable to assume Polypharmacy intervention could significantly reduce medical cost.

PHP21

DETERMINANTS OF STATE MEDICAID PER CAPITA PRESCRIPTION DRUG EXPENDITURES: A STRUCTURE EQUATION MODELING APPROACH

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OBJECTIVES: State Medicaid programs vary drastically in terms of their prescription drug expenditure per recipient. Prior research has attempted to explain these variations by identifying potential determinants of drug expenditure. However, analyses in the past have been restricted to a few variables and several other potential determinants and their interactions have not been investigated. Objectives of this study were: a) To identify potential determinants of Medicaid per capita drug expenditures based on an established comprehensive model for health services utilization; and b) to test impacts of the identified determinants on per capita drug expenditures. **METHODS:** This study employs Andersen's Behavior Model of Health Services Utilization to identify potential determinants of pharmaceutical expenditures in state Medicaid programs using publicly available data. A structure equation model was built to test relationships among the latent constructs of policy, access, predisposing characteristics, enabling resources, and need for health care, and their influence on drug utilization. **RESULTS:** "Predisposing characteristics" were found to impact "enabling resources" which, in turn, was

found to significantly impact drug utilization. Among the observed variables, "access to hospitals" and "access to primary care physicians" significantly described "health care resources"; "risk of diseases" described "need for health care"; and "poverty" described the latent construct of "enabling resources". The "policy" construct was not described adequately by the indicator variables. **CONCLUSION:** Based on the study results, we conclude that Medicaid policy and program interventions, as described in this model, do not influence drug costs significantly. Population characteristics like predispositions and enabling resources determine drug costs in the state Medicaid programs.

PHP22

HEALTH REIMBURSEMENT ACCOUNT BASED CONSUMER DRIVEN HEALTH PLANS: THEIR IMPACT ON MEDICAL UTILIZATION, PHARMACY UTILIZATION AND EXPENDITURES

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OBJECTIVES: To examine the impact of consumer driven health plans (CDHPs) on pharmacy and medical utilization, health care and pharmacy expenditures. **METHODS:** We utilized enrollment, medical and pharmacy claims data from a national employer who switched from offering a traditional PPO based plan (i.e., the "pre" period in 2004) to only offering CDHP options to their employees in 2005 (i.e., the "post" period). Patients with select chronic diseases including diabetes and asthma were included for analyses. Outcomes measured included total number of prescriptions, disease based medication adherence (estimated by the Medication Possession Ratio (MPR) with 80% or higher classified as being "adherent"), ER, inpatient and outpatient visits and pharmacy and health care expenditures. GEE (Generalized Estimating Equations) for repeated measures were used because there are 2 correlated observations on each subject in the dataset adjusting for age, gender, co-morbid risk scores, family size, coverage status and migration patterns between the CDHP options. Outcomes variables that were characterized by a large proportion of 0s and extreme right skew were analyzed using two-part models with logarithmic transformation of the non-zero observations and a smearing re-transformation. **RESULTS:** Preliminary results show that for CDHP switchers there was a reduction in most measures: outpatient visits reduced by 22%, total number of prescriptions decreased by 25%, medical and pharmacy expenditures reduced by 22% and 24% respectively. Individuals were 37% less likely to be adherent with their drug therapy across all disease states in a CDHP compared to their adherence in a PPO plan. There were no appreciable differences in ER and inpatient visits. **CONCLUSION:** Switching to a CDHP resulted in lower utilization of some services and expenditures. Switching was also associated with decrease influenced by CDHP benefit design. CDHPs can be a useful plan offering but plans should design interventions to improve medication adherence.

PHP23

A NATIONAL SURVEY ON PRESCRIBERS' KNOWLEDGE OF AND THEIR SOURCE OF DRUG-DRUG INTERACTION INFORMATION

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