followed by mandatory 90-day (36.85%, 35.51%) and 30-day retail program (33.73%, 32.41%) in both claims level and patient level, respectively. However, only the GDR differences between voluntary 90-day retail program and 30-day retail program were found to be statistically significant for all three therapeutic classes at both claim and patient level (P < 0.05).

CONCLUSION: The study showed comparable results indicating that there were no drastic difference in the utilization of generic drug by claims and patients between mandatory 90-day retail program and 30-day retail program. However, voluntary 90-day retail program showed a significantly higher share of generic utilization than 30-day retail program.

PHP17

PREVALENCE OF CLINICALLY IMPORTANT POTENTIAL DRUG-DRUG INTERACTIONS IN REGIONE EMILIA ROMAGNA, ITALY

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OBJECTIVES: To estimate the prevalence of clinically important potential drug-drug interactions (DDIs) among residents of Regione Emilia Romagna (RER), Italy. METHODS: We conducted a retrospective cohort study using the 2004 outpatient prescription claims database of RER, which was linked to the 2004 demographic file of 4,222,165 RER residents. Using a previously published list of clinically important potential DDIs as a framework, we identified 11 potential DDIs that could be captured through the RER database because both drugs were reimbursed by the 2004 Italian National Formulary. A potential DDI was defined as the presence of a minimum 5-day overlap in days supply for each of the drugs in an interacting pair. The World Health Organization Anatomical Therapeutic Classification/Defined Daily Dose System was used to determine a proxy measure of days supply for each drug. The one-year prevalence of each potential DDI was quantified at the patient level.

RESULTS: In 2004, the 11 potential DDIs occurred 7,379 times in 6,681 RER residents, yielding a one-year prevalence of 158.2 cases per 100,000 individuals. The mean age of those exposed to potential DDIs was 74.1 (SD = 10.8) years and about 52% were female. Of those exposed, 559 (8.4%) were exposed to 2 potential DDIs and 64 (1.0%) were exposed to at least 3 potential DDIs. The most commonly identified potentially interacting medication pairs were warfarin and nonsteroidal anti-inflammatory drugs (5,616 cases), theophylline/aminophylline and the fluoroquinolones ciprofloxacin and fluvoxamine (759), warfarin and fibric acids (530), and warfarin and barbiturates (530). The percentage of patients exposed to at least 2 potential DDIs was 46.7% (95% CI: 44.9–48.5%)

CONCLUSION: To our knowledge, this is the first large population-based study in Italy documenting the prevalence of potential DDIs. A substantial number of clinically important potential DDIs were identified, particularly among warfarin users. DDIs are predictable, hence preventable. Awareness of the most commonly occurring potential DDIs can help practitioners prevent coadministration of these potentially dangerous medication combinations.

PHP18

BENEFICIARY OUT-OF-POCKET: A CROSS-SECTIONAL PILOT STUDY IN THE SAUDI MINISTRY OF HEALTH HOSPITAL OUTPATIENT CLINICS

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OBJECTIVES: To estimate the beneficiary’s out-of-pocket spending to fill their prescriptions in 2003 at the Saudi Ministry of Health (MOH) hospital outpatient clinics. METHODS: A non-randomized sample of 19 hospitals participated in a study investigating the influence of pharmacy and therapeutics (P&T) committee and pharmacy information system (PIS) on patients’ access to and utilization of prescription drugs. These hospitals were selected deliberately to represent different levels of PIS and P&T committee characteristics based on the results of a descriptive study of all 127 non-specialized MOH hospitals. Systematic sampling was used to audit 150 patients prescription papers (orders) from each hospital outpatient pharmacy. The cost estimates based on community pharmacy market price.

RESULTS: Of 2850 audited patient records, only 202(7.1%) had a free access rate less than 100 percent and have to pay out-of-pocket. The mean of out-of-pocket spending is $16.5 (median 10.8) years and about 52% were female. Of those exposed, 559 (8.4%) were exposed to 2 potential DDIs and 64 (1.0%) were exposed to at least 3 potential DDIs. The most commonly identified potentially interacting medication pairs were warfarin and nonsteroidal anti-inflammatory drugs (5,616 cases), theophylline/aminophylline and the fluoroquinolones ciprofloxacin and fluvoxamine (759), warfarin and fibric acids (530), and warfarin and barbiturates (530).

CONCLUSION: The spending rate is significantly correlated with non-formulary drugs (r = 0.48) and associated with a single source brand name. The results were mixed across disease states. In patients with psoriasis, we found that medication adherence rates (using medication possession ratios) for oral antidiabetics was significantly higher for whites [59%] as compared to African Americans [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 asthma. The results were mixed across disease states. In patients with type 2 we found that medication adherence rates (using medication possession ratios) for oral antidiabetics was significantly higher for whites [59%] as compared to African Ameri-

PHP19

RACE AND ASSOCIATED MEDICATION ADHERENCE IN MEDICAID ENROLLED PATIENTS WITH CHRONIC DISEASE

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OBJECTIVES: Medication adherence is a major obstacle to overcome when treating chronic medical conditions. Many factors can influence how well a medication regimen is complied with, including patient demographics such as race. The aim of this study was to determine how race can affect medication adherence in Medicaid-enrolled patients with chronic disease.

METHODS: We examined the association between race and controller medication adherence in confounder adjusted multivariate analyses on data from 3 retrospective cohorts enrolled in the North Carolina Medicaid program. These cohorts included patients with primary diagnoses of asthma (n = 710), type 2 diabetes (n = 2655), and psoriasis (n = 186). The data for these studies was extrapolated from the North Carolina Medicaid claims and eligibility files and patients were followed up for a minimum of two years.

RESULTS: The results were mixed across disease states. In patients with type 2 we found that medication adherence rates (using medication possession ratios) for oral antidiabetics was significantly higher for whites [59%] as compared to African Americans [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].