

OBJECTIVES: To 1) Determine 2012 price trends for 12 therapeutic areas in 12 countries; 2) segment countries and therapeutic areas by predominant price trend, and 3) analyse drivers behind price movements. **METHODS:** We analysed price movements over 2011-2012 for oncologics (L01, L02), respiratory products (R03), antidiabetics (A10A, A10B), lipid regulators (C10A, C10C, C11), antipsychotics (N05A), angiotensin II antagonists (C09C, C09D, C09X), anti-ulcerants (A02B), antidepressants (N06A), antivirals (J05A), platelet aggregation inhibitors (B01A), vaccines (J07), and multiple sclerosis treatments in Australia, Brazil, Canada, France, Germany, Greece, Italy, Japan, Spain, Turkey, the UK, and the United States, using IHS's pricing database, PharmOnline International. All 56,949 analysed presentations were studied for their 2012 price trend ("price cut", "price increase", and "no price change"). Within each country, therapeutic areas were assigned a predominant price trend on a percentage basis. **RESULTS:** In 2012, four markets (France, Italy, UK, United States) were associated with price stability as a predominant price trend across the therapeutic areas considered while five (Australia, Canada, Greece, Japan Turkey) were associated with price cuts, one (Germany) with price increases and two (Brazil, Spain) with co-dominant price trends. In 2012, six therapeutic areas (L01/L02, R03, A10A/A10B, J05A, B01A, and J07) were associated with price stability as a predominant price trend across the markets considered while six (C10A/C10C/C11, N05A, C09C/C09D/C09X, A02B, N06A, multiple sclerosis treatments) were associated with price cuts. **CONCLUSIONS:** Price trends vary not only by country and therapeutic area but also over time. At the country level, predominant price trends reflect the role that national P&R systems and pricing policy play as drivers of price changes. At the therapy area level, dominant pricing trends somewhat correlate with the extent of generic competition.

PHP24

INDICATORS OF QUALITY DRUG SUPPLY WITHIN THE FRAMEWORK OF THE GUARANTEED VOLUME OF FREE MEDICAL CARE IN THE REGIONS OF KAZAKHSTAN

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OBJECTIVES: To study the quality of patients' drug supply within the framework of the guaranteed volume of free medical care in regions of Kazakhstan. **METHODS:** Anonymous interview of doctors was conducted using a specially designed questionnaire comprising 20 questions. Questionnaire survey covered 638 physicians of medical institutions of Almaty and the five regions of Kazakhstan. The analysis was conducted in the outpatient organizations, hospitals and health care organizations that provide specialized care. Their share of the general sample was 57.4%, 40.8% and 4.9%. **RESULTS:** The survey revealed that 51.7% of the doctors in the interview are directly involved in the process of forming the list of drugs to be purchased and knows formulary list of medical organization and working with it. 88.9% of respondents have never had courses of drug management. In the most cases (70%) sources of information about new drugs for doctors are scientific seminars and conferences organized by pharmaceutical companies, specialized publications (60%), work colleagues and medical representatives (61%), 25% of cases from information materials in pharmacies, advertising in media (19%) and specialized exhibitions (15%). 92.7% of respondents are rely to a treatment protocols prescribing drugs. At the same time, 84.6% of doctors still had to advise patient to buy drugs what don't included into formulary list of medical organization for effective treatment. Less than 20% of respondents mind about a price of assigned medicine, and only 5% is guided by consultation with a pharmacist. 66.8% of respondents are not satisfied or partly satisfied by the quality of purchased drugs. At the same time more than 50% reported the absence of efficiency in their prescribing. **CONCLUSIONS:** Thus, there are certain problems in questions of populations' drug supply and also the prescribing and using of medicines by the doctors that can affect on the efficiency of the treatment.

PHP25

THE EFFECT OF FDA RISK EVALUATION & MITIGATION STRATEGIES ON UTILIZATION OF SELECTED DRUGS USING DATA FROM TWO NATIONAL SURVEYS

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OBJECTIVES: Title IX of the 2007 Food and Drug Administration (FDA) Amendments Act provided the FDA with enhanced authority to ensure drug safety by (1) requiring post-approval risk studies; (2) requiring that new safety information be added to product labeling; and/or (3) requiring companies to submit a Risk Evaluation & Mitigation Strategy (REMS) to ensure that the product's benefits outweighed the risks. The objective of this study was to describe national utilization trends for selected drugs for which a REMS has been implemented. **METHODS:** Data were obtained and combined for five years, 2006 through 2010, from two large national surveys: the National Ambulatory Medical Care Survey (NAMCS) and the National Hospital Ambulatory Medical Care Survey (NHAMCS). The weighted annual frequencies of drug mentions were computed for the following 12 drugs: rosiglitazone, exenatide, olanzapine, quetiapine, metoclopramide, ciprofloxacin, levofloxacin, moxifloxacin, pregabalin, topiramate, lamotrigine, and levetiracetam. Each drug had a REMS requirement imposed between December 2008 and December 2009. **RESULTS:** To date there have been 206 REMS plans deemed necessary and approved by the FDA, including currently active individual and group REMS plans as well as inactive (released) REMS programs. In 2006, for the 12 individual drugs selected for this study, the number of times a drug was mentioned ranged from 1.1 million for exenatide to 6.8 million and 6.9 million for levofloxacin and ciprofloxacin, respectively. In the year of REMS approval and/or the year immediately following approval, a decline in utilization was observed for 11 of the 12 drugs ranging

from 4.6% to 53.3% (% change relative to previous year). Only one drug, levetiracetam, showed no decline in utilization. **CONCLUSIONS:** This study showed a relationship between REMS implementation and declining utilization. However, future work is warranted to evaluate the partial effect of REMS implementation compared to other possible factors affecting utilization.

PHP26

IMPACT OF SOUTH CAROLINA'S PRESCRIPTION DRUG MONITORING PROGRAM ON THE USE OF BENZODIAZEPINES IN A COMMERCIALLY INSURED POPULATION

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OBJECTIVES: One criticism of prescription drug monitoring programs (PDMPs) is that they may compromise access to appropriate therapy, called the 'chilling effect'. Previous research evaluating the impact of benzodiazepine monitoring in New York (NY) reported that benzodiazepine use dramatically decreased and remained stable at that lower level. In January of 2008, South Carolina (SC) implemented a PDMP that included benzodiazepine monitoring. We examine the impact of the PDMP on benzodiazepine use by comparing use before and after implementation. **METHODS:** We used a publically available, private insurance claims database containing records from January 2007 to December 2009. Continuously eligible SC residents between ages 19-65 were analyzed. Logistic regression models examined the likelihood of filling a benzodiazepine prescription during each month. Control variables included PDMP status (active vs. inactive) and recipient characteristics (age, gender, race, and education). Interaction terms were included to determine if the PDMP had a differential impact based on demographics. Statistical analysis was conducted in STATA v12.0. **RESULTS:** A total of 20,260 recipients were included. Regression results showed recipients have higher odds of filling a benzodiazepine prescription when the PDMP is active versus inactive (p-value<0.001; CI 1.377-2.023). PDMP implementation was shown to more negatively impact the likelihood of females filling a benzodiazepine prescription compared to males (p-value 0.009; CI 0.8272-0.9727) and recipients between 50-65 years compared to recipients 19-29 (p-value 0.034; CI 0.7029 -0.9866). **CONCLUSIONS:** In this population, the implementation of the PDMP did not create a 'chilling effect' by decreasing the likelihood recipients would fill a benzodiazepine prescription; a contrast to previous findings from NY. Our study is limited by the use of a pre/post design with only three years of data from a privately insured population. Further research should focus on additional states and populations to better determine the impact of PDMPs on benzodiazepine use.

PHP27

REGIONAL VARIATION IN USE OF GENERIC DRUGS AND MEDICARE PRESCRIPTION DRUG COST SHARING

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OBJECTIVES: Regional variation in Medicare prescription drug spending is largely driven by the use of expensive brand-name drugs versus cheaper generic drugs in some areas. We examined the relationship between Part D cost sharing and regional variation in use of generic drugs overall and in a widely used drug class: statins. **METHODS:** Data were from a 10% random sample of Medicare beneficiaries in 2009. We assigned beneficiaries to 306 hospital-referral regions (HRRs). Our outcome measures, constructed at the HRR-level, were the share of prescriptions filled for generic drugs, overall and for statins. Key independent variables were the absolute dollar difference for the mean copayment between a brand-name drug and a generic drug (standardized to a 30-day supply). All estimates were adjusted for the demographic and health status differences. Spatial lag models were used for estimation in order to account for spatial autocorrelation of HRR-level. **RESULTS:** The share of all prescriptions filled for generic drugs ranged across HRRs from 59.1% to 80.3% for drugs overall, and from 43.8% to 84.2% for statins. The copayment difference between brand-name and generic drugs ranged from \$28.9 to \$58.0 for drugs overall and from \$28.0 to \$33.7 for statins. Controlling for all other covariates, the copayment difference had a strong positive association with share of prescriptions filled for generic drugs overall (coefficient: 0.19; p<0.05) and for statins (coefficient: 0.81; p<0.01). **CONCLUSIONS:** Regions with Part D plans that had a larger differential in cost-sharing between generic and brand-name drugs had higher rates of generic drug use than regions where plans had smaller cost-sharing differences. Increasing the cost-sharing difference between generic and brand-name drugs could be an effective way to encourage greater use of less-expensive generic drugs in high-cost regions. This change in benefit design could generate substantial savings for the Medicare program and for beneficiaries.

PHP29

REIMBURSEMENT AND MARKET ACCESS OF IMAGING DIAGNOSTICS APPLICATIONS: LESSONS FROM A SURVEY OF GLOBAL HEALTH TECHNOLOGY ASSESSMENTS

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OBJECTIVES: Imaging diagnostics include test applications in which images of living tissue are captured and evaluated for guiding clinical decision-making. In recent years, the push for faster, less invasive testing methods has driven the rise in development of novel imaging diagnostics for detecting, staging and monitoring disease. Imaging diagnostic applications, however, present with