ferent amounts per health category even after adjusting for population size and needs. **CONCLUSIONS:** The cluster analysis indicates that the health areas cannot be considered to behave similarly to one another, since there is more than one cluster in each year and the clusters are stable over time.

PHP79

MEDICATION USE SURVEY OF INPATIENTS WITH BASIC MEDICAL INSURANCE FROM 2010 TO 2012

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OBJECTIVES: The objective is to provide data support for government decision-making by having a general view of the status of disease composition, patient flow and use of drug and treatment of inpatients with basic medical insurance in cities and towns based on sample survey on the medical service utilization and payment of such inpatients from 2010 to 2012. **METHODS:** Sort all patients by the time of being released, according to systematic sampling method, extract a certain proportion of the insured patients' hospitalizing information in sampling area. Then project the sample data to the country. Retrospective study using SQL server and related software. **RESULTS:** Total hospitalization expenses under urban basic medical insurance increased every year, reaching RMB425.3 billion in 2012, got 67.77% increase compared with 2010. Expenses increased primarily due to the growth of person-time in receiving treatment. The patient-time in receiving treatment reached 4945 times in 2012, 57.18% increases over 2010. In 2012 the average hospitalization expenses amounted to RMB8,601, an increase of 6.75% compared with RMB8,057 in 2010. Diseases in circulatory, respiratory, and digestive system as well as tumor remain the top four most afflicted, accounting for about 60% of the total inpatient population. In the disease sub-category, the three most common diseases accounted for more than 20% of total diseases in patient-times. Due to strengthened clinical management of antibiotics use, expense of systimic anti-biotics decreased year by year, with 22.46% in 2012, significantly lower than 28.99% in 2010. **CONCLUSIONS:** With the establishment and improvement of national health insurance, the needs for medical service of insured patients were met with substantive effect, but the resulting pressure on fund spending should be given more attention. With the continuous attention to the rational clinical treatment, irrationality of clinical medication use has improved, but there still remains room to improve.

PHP80

WHICH DISEASES ARE DRIVING THE INCREASE IN SPENDING FOR THE PRIVATELY INSURED POPULATION OF THE US?

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OBJECTIVES: This study examines disease-specific spending across the full range of conditions to identify which conditions are driving the growth in overall spending in recent years. **METHODS:** Truven Health MarketScan data for 8M employees and their dependents in FFS plans in 2007 and 12M in 2012 are analyzed. The samples were weighted to reflect the demographic composition of all US employer health plans in those years (as captured by the US Medical Expenditure Panel Survey). Total health care spending for each patient was allocated across diseases using the Medical Episode Grouper (MEG). MEG allocates the 16,000 ICD9 diagnosis codes into 572 conditions. Drug spending is assigned to conditions based on clinical logic. Adjudicated payments were summed for each episode type that a patient experienced. Analysis focused on absolute change in level of per member per year (PMPY) spending (total and out-of-pocket) from 2007 to 2012. We examined the contributions of disease prevalence and cost per case. **RESULTS:** PMPY spending grew 3.8% per year between 2007 and 2012. Hospital outpatient spending grew faster (5.9%) than other settings and prescription drug spending was lower (1.7%). The top 10 conditions account for 32% of all spending growth. Preventive health services drove up spending by $73 PMPY and was the number 1 driver of increased spending. Deliveries, both vaginal and Cesarean Section were in the top 10. So too were four conditions where obesity is an aggravating factor. Cost per case was much more of growth driver than changes in treated prevalence. 2013 results will be available for presentation. **CONCLUSIONS:** Administrative data when handled carefully can provide a broad overview of changing healthcare landscape. The modest cost growth for this population has been widely shared across many conditions.

PHP81

ACA'S IMPACT ON MERGERS AND WELLNESS: ASSESSING VALUE FOR MONEY

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OBJECTIVES: The Affordable Care Act (ACA) initiated healthcare reforms that stress "triple aim" goals: improving patient care, population health, and reducing costs. Hospitals are forming mergers and have expanded their employee health and wellness programs. The objectives are to (1) summarize the literature on mergers, health outcomes, and cost-containment (2) describe value for money of health and wellness programs, and (3) provide examples of successful mergers. **METHODS:** A systematic review was conducted to identify the costs and benefits of mergers and wellness programs. Articles after 2008 were compiled using search engines PubMed, Galileo, Ebscohost, and Google Scholar. Key terms were "value for money", "corporate", "health and wellness program", "health plan", "insurance plan", "hospital", and "merger." Exclusion criteria were articles involving forms of consolidation and wellness programs not tied to insurance plans and without reported costs and/or health outcomes. **RESULTS:** A total of 29 relevant articles were retrieved. Findings revealed mergers prevent hospitals from trading-off quality and services for cost reductions. However, studies suggest that anticompetitive effects of mergers will increase costs. Before the ACA, employers had wellness programs that were not standardized. The ACA encouraged improvement of these programs by funding expanded services and mandating quality. Studies show that wellness programs are growing in number and in various sizes, services, and incentives resulting in a significant to non-significant return-on-investment (ROI). Few employers have measured the ROI and even fewer their health outcomes. However, successful programs have shown a median ROI between 2:1 and 3:1. Studies suggest that disease-management services account for significantly positive ROI while lifestyle management services do not. For example, the partnership between Piedmont and WellStar of Georgia supported implementation of care-management programs, with higher quality at lower costs. **CONCLUSIONS:** Although most are not reporting ROI, studies show the value of wellness programs should be based on health outcomes.

PHP82

IMPACT OF CLINICAL AND HEALTH ECONOMIC PUBLICATIONS ON COMMERCIAL SUCCESS OF PHARMACEUTICAL PRODUCTS IN THE U.S

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OBJECTIVES: The study objective was to estimate the causal effect of the publication of drug-specific clinical and health economic and outcomes research (HEOR) publications on US drug product sales. **METHODS:** Quarterly sales data for twenty-two drugs, (biologics for rheumatoid arthritis (RA), new generation asthma drugs and statins) and contemporaneous publication counts of HEOR, clinical and meta-analytic studies via literature search were analyzed. Clinical studies were categorized by journal impact factor. The total analysis period spanned 2003-2013, with drug-specific exposure varying based on its branded status over that timeframe. Covariates included generic availability, safety warnings, and new indications (as a proxy for sales effort). First difference and difference in first difference fixed effects models were used to control for unobserved time invariant and constant-rate time-variant unobserved confounders and estimate the causal effect of an additional study in a given quarter and the increase in sales in the next quarter. **RESULTS:** In the statin market, the potential casual effect of an HEOR study publication on next quarter's sales was $1 - $2.2 million. High-impact clinical publication also significantly increased sales in the next quarter (~$7 million). In RA and asthma markets, HEOR studies were not statistically linked to quarterly sales, but high-impact clinical studies were found to have significant effects on asthma drug sales in the next quarter (~$7.5 million). Meta-analyses were only found to have a significant effect on RA drugs sales (~$3.5 million). **CONCLUSIONS:** Impact of publications on sales varied. Both HEOR and high-impact clinical studies were associated with an increase in quarterly sales in the statin market, where generic competition is high. These effects were seen to a lesser degree in the statin and RA markets, where generic competition is lower. Market characteristics that vary across the studied classes, such as branded and generic competition, may dictate returns from HEOR and clinical studies.

PHP83

PREVALENCE OF MEDICATION USE NOT CAPTURED BY PRESCRIPTION CLAIMS DATABASES â€“ AN ANALYSIS USING 2012 MEDICAL EXPENDITURE PANEL SURVEY DATA

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OBJECTIVES: Prescription claims databases are used for identifying patients for disease management programs and studying health outcomes. The growth in the use of drug samples and discount generic programs suggests that an increasing number of prescriptions dispensed to insured consumers may not be captured on claims databases. We examined the extent to which prescription claims databases do not provide complete records of insured patients' drug use and report the top 5 drug classes that were dispensed as drug samples and discount generics. **METHODS:** We used the 2012 Medical Expenditure Panel Survey (MEPS) dataset. We included participants who purchased at least one prescription medication and had prescription drug insurance for 2012. We quantified the extent to which insured patients used drug samples and/or discount generics. We reported descriptive statistics. We used Enhanced Therapeutic Classification (ETC) codes to report the top 5 drug classes that were dispensed as drug samples and discount generics. **RESULTS:** A total of 78.6% of the U.S. non-institutionalized civilian population was insured for prescription drugs. Of the total number of prescriptions dispensed to insured consumers, at least 0.5% were drug samples and 4.8% were potentially discount generics. Additionally, 8% of insured consumers received at least one sample medication and 21.5% used at least one potential discount generic product. The top 5 drug classes dispensed as drug samples in descending order were statins, Angiotensin Converting Enzyme (ACE) inhibitors, beta-blockers (cardiac selective), Selective Serotonin Reuptake Inhibitors (SSRIs) and Proton Pump Inhibitors (PPIs). The top 5 drug classes dispensed as discount generics in descending order were statins, ACE inhibitors, SSRIs, beta-blockers (cardiac selective) and PPIs. **CONCLUSIONS:** Our results indicate that drug samples do not contribute substantially to the problem of missing prescription data on claims databases. A substantial number of prescriptions that are discount generics may be missing from these databases.

PHP84

IMPROVED HEOR WRITING SKILLS OF KEEN INTEREST TO BIO/PHARMA HEOR DIRECTORS AND MANAGERS

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OBJECTIVES: While all pharmaceutical organizations are held accountable for disseminating scientific literature supporting their product's health economics and outcomes (HEOR) data, it is not known whether professionals in HEOR agree on the quality of materials being disseminated; nor do we know how often these documents are developed internally or outsourced. Therefore, the objective of this study was to assess the perceived level of quality of the materials as well as who is developing the