suggest that there is potential for significant savings arising from new generic competition in the next few years. The magnitude of these savings will depend on the degree to which policy changes impact generic prices. However, there may less opportunity in the longer term. This issue is compounded by uncertainty as to the regulatory requirements, manufacturing processes and pricing for "generic" versions of biologics.

**PHP19**

**LONGITUDINAL ANALYSIS OF USTEKINUMAB DOSING IN PATIENTS WITH OR WITHOUT PRIOR BIOLOGIC EXPERIENCE IN THE WOLTERS KLUWER SOURCE® LX NATIONAL HEALTH CLAIMS DATABASE**

**OBJECTIVES:** To report ustekinumab dosing patterns in a large United States (U.S.) retrospective healthcare claims database. **METHODS:** Patients with ustekinumab prescriptions between 9/25/2009 and 12/31/2010 (first claim set index date) and the study period. Across all drug groups, the PNA rate was 9.8%. **RESULTS:** Overall median/mean dosing interval was 28/34 days for the first to second fill. Median/mean dosing intervals for subsequent fills spanned 86-88/85-89 days. Dosing intervals were similar among bio-experienced and bio-naïve patients. **CONCLUSIONS:** In this longitudinal study of ustekinumab utilization in a U.S. healthcare claims database, nearly three-quarters of ustekinumab users had prior treatment with biologics. Two-thirds of initial ustekinumab dosages were 45 mg. Most patients remained at or below their starting dose. Dosing intervals were consistent with prescribing recommendations (approximately one month for first doses, followed by quarterly intervals). Dosing patterns in bio-experienced and bio-naïve patients were similar.

**PHP20**

**FACTORS ASSOCIATED WITH PRIMARY NONADHERENCE TO CHRONIC AND ACUTE MEDICATIONS**

**OBJECTIVES:** To identify factors associated with primary nonadherence [PNA]. **METHODS:** This retrospective cohort study identified all new prescriptions written for ustekinumab (bio-naïve). Initial doses of 45 mg were observed for 69.3% of bio-experienced patients, 59.1% of bio-naïve patients. Most patients remained at or below their starting dose. Dosing intervals were consistent with prescribing recommendations (approximately one month for first dose, followed by quarterly intervals). Dosing patterns in bio-experienced and bio-naïve patients were similar.

**PHP21**

**COMPLEMENTARY AND ALTERNATIVE MEDICINE USE AMONG PEOPLE WITH DISABILITIES: NIH 2007 SURVEY**

**OBJECTIVE:** To compare rates of Complementary and Alternative Medicine (CAM) use among individuals with and without disabilities. **METHODS:** We used a cross-sectional design. Our data source was the 2007 National Health Interview Survey files and the Adult Complementary and Alternative Medicine Supplement. Individ-
uals who reported limitation in activities due to any condition were considered having disability. Any use of CAM use in the past 12 months for adults, and CAM supplement use was based on 21 different types of self or practitioner-based therapies. Our final study sample (N = 23,175) consisted of adult respondents over age 18 and who did not have any missing values for disability status or CAM. Chi-square tests were performed to test significant group differences between disability status and all other predictor variables. Logistic regression was used to assess the relationship between disability status and CAM use after controlling for demographic, socio-economic, access to care, health status, and life-style risk factors. All analyses adjusted for the complex survey design. RESULTS: Overall, 32% of the sample reported any use of CAM in the past 12 months. Nearly one third (31%) reported activity limitations. The rates of CAM use was significantly higher among individuals with disability (38.9%) compared to those without disability (30.4%). Results from logistic regression suggested that people with a disability were almost 2 times more likely to report using CAM even after adjusting for age, gender and disability (OR 1.96, 95% CI 1.75-2.18, p < 0.003). CONCLUSIONS: Individuals with disabilities were more likely to use CAM compared to individuals without disabilities. A plausible reason for greater use of CAM among individuals with disability could be due to the failure of conventional therapies in treatment and alleviation of symptoms. Future studies need to examine as to whether greater CAM use among those with disability is related to failure of treatment with conventional therapies.

PHP22
EXPLORATION OF CLAIMS-BASED UTILIZATION MEASURES FOR DETECTING NON-MEDICAL USE OF PRESCRIPTION DRUGS
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OBJECTIVES: Due to barriers such as cost, regimen complexity and perceived ineffectiveness, a substantial percentage of patients do not conform to medical instructions. Onsite health centers on campus pharmacies may improve medication adherence through treatment, holistic and relatively inexpensive care. Accordingly, this study sought to evaluate the influence of these onsite pharmacies on medication adherence. METHODS: A retrospective analysis of electronic prescribing and claims data was performed to assess medication adherence among employees and their dependents that received medications from an onsite health center’s pharmacy and comparison pharmacy and with those that used an alternative site. Specifically, the medication possession ratio (MPR) was evaluated for patients who received medication associated with treatment of asthma, depression, diabetes, hypertension or hyperlipidemia. In addition, a subsample of MPR among condition management participants was performed. RESULTS: Overall, the MPR among patients who used the onsite health center’s pharmacy was higher than among those who used an alternative source: 54.8% versus 50.7%, respectively. In particular, the MPR was significantly (P < 0.002) greater for hypertensive patients who used the onsite pharmacy compared to those who did not. In general, the longitudinal analysis did not demonstrate significant differences between groups across time, indicating that medication adherence was relatively consistent over the study period. Across conditions, medication adherence was significantly (P < 0.001) higher among patients who used the site in condition management programs than among those who were not enrolled. CONCLUSIONS: Both the onsite health center’s pharmacy and condition management program participation positively impacted medication adherence among employees and their dependents.

PHP25
DERIVING PATIENT CHRONIC DISEASE CONDITIONS FROM MEDICATION CLAIMS TO PROVIDE PREVENTION SERVICES USING COMBINATION OF CLINICAL RULES AND LOGISTIC REGRESSION
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OBJECTIVES: Pharmacists are on the frontline of health care and have the ability to provide direct patient care in the form of prescription counseling, medication therapeutic management, and patient health and wellness education. While other healthcare providers often have access to medical records and other forms of diagnosis data, pharmacists typically rely on prescription dispensing data. The absence of diagnosis information, and the need to potentially rely on the medications used by patients to the care that can be provided. This study aims to evaluate the use of a clinical rules and predictive models to improve patient chronic disease identification. METHODS: A retrospective analysis was conducted using de-identified pharmacy and medical claims data covering the period for years 2007 and 2008. Patient disease conditions were derived from pharmacy claims using Medi-Span® drug indication database. We compared the medication-derived disease conditions to ICD-9 diagnoses obtained from medical claims. Diagnoses evaluated were: diabetes mellitus, asthma/ COPD, rheumatoid arthritis, Parkinson’s disease, human immunodeficiency virus, multiple sclerosis, and hyperlipidemia. Multivariate logistic regression models were built to improve the accuracy of disease identification. RESULTS: There was good agreement between medication-derived patient disease conditions and medical claims-derived conditions, with agreement rates existing among selected diseases. When using the medication-derived patient disease condition indicator alone as a predictor in a logistic model, predictive power as expressed in the area under curve (AUC) for all seven diseases ranged from 0.72 to 0.90. Adding age, gender, number of therapeutic class and drug cost as predictors to the models significantly improved the AUC an average of 13%, and the seven diseases ranged from 0.83 to 0.94. CONCLUSIONS: Pharmacy claims data are reasonably accurate identifiers for chronic disease conditions when underlying conditions require specific medication treatments. Combining patient demographic information and medication-related covariates into logistics regression models can enhance ability to identify patient conditions.

PHP26
MULTIMORBIDITY AND POLYPHARMACY
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OBJECTIVES: Polyparmacy, defined as concurrent use of six or more medications, is a critical issue in individuals with multiple chronic physical conditions. The objective of the study is to estimate the rates and types of drug use and hence polyparmacy among individuals with multiple chronic physical conditions and consequently to assess the relationship between polyparmacy and various clusters of conditions to identify the trends of polyparmacy in particular clusters of conditions. METHODS: Cross-sectional analysis of 9595 individuals of age above 21, with at least one chronic physical condition. Chi-square tests and multivariate logistic regressions were performed to analyze the rates and types of drug use and hence polyparmacy among various chronic clusters. All analysis accounted for the complex survey design of the MEPS.