uals who reported limitation in activities due to any condition were considered having disability. Any use of CAM use in the past 12 months was derived from the adult CAM supplement and 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 any CAM use. Logistic regression was used to assess the association 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 respondents reported CAM use 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 as likely to use CAM even after adjusting for other characteristics(AOR= 1.96, 95% CI= 1.75-2.18, p≤0.001). **CONCLUSIONS:** Individuals with disabilities were more likely to use CAM use 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: To explore the ability of claims-based utilization measures – including traditional adherence measures, a novel measure of overlapping days supply, and measures of asymmetric use within a population – to detect non-medical prescription drug use. **METHODS:** Prescription claims from a large employer-based administrative claims database (MarketScan) were used to evaluate drug utilization during the first year after an index prescription for 6 classes of drugs with a known abuse potential and 3 classes without. Population-level measures of traditional adherence metrics (i.e., MPR and PDC) and a novel measure of overlapping days supply (MPR:PDC ratio) were calculated for all medications. Measures of asymmetrical use within a population were evaluated with the Lorenz curve, representing the total drug supply used by the heaviest 1%, 5% and 50% of all users. Each measure was used to rank order (high to low) agents across and within classes. The resulting lists were qualitatively compared on their ability to rank order similar or dissimilar patterns. **RESULTS:** The study cohort included 6,840,355 patients, mean age 48.1 years, 56.5% female. The mean MPR for drugs with known abuse potential (0.13-0.53) was lower than for drugs without (0.72-0.84). The MPR and PDC ranking across drugs was consistent, but the MPR:PDC and Lorenz curve ranking showed a different pattern. In addition, several abusable drugs had the highest mean MPR:PDC ratios (i.e., 1.14 for morphine, 1.13 for oxycodone, 1.11 for dextroamphetamine). Percent drug use by the heaviest users was also higher for abusable drugs (e.g., Lorenz 1% of 29.1% for acetaminophen with codeine, 21.5% for acetaminophen with oxycodone, and 18.4% for oxycodone). **CONCLUSIONS:** Patients taking drugs with a known abuse potential exhibited different utilization patterns compared to drugs without. Measures accounting for overlapping days supply and asymmetrical drug use within a population may be better suited to detecting non-medical prescription drug use.

PHP23
SAVINGS THROUGH THE INCREASED USE OF GENERIC MEDICINES BY ELDERLY: THE BELGIAN CASE

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OBJECTIVES: To explore the use of generic medicines amongst elderly in Belgium. Therefore, market shares by volume of generic medicines for the different ATC drug classes are calculated. Possible savings of increased use of 20 generic medicines, based on the top expenditures in the off-patent market in Belgium, are calculated. **METHODS:** Data on the use of medicines in the elderly population were derived from a regional community pharmacy database which collects data of dispensed prescription medicines in a selection of Belgian public pharmacies. The variables delivered were the name, the ATC-code, the number of packages sold in 2010, the average price and the defined daily dose. Savings were calculated using weighted average price levels for both originator and generic medicines. Three scenarios of potential savings were calculated: a 5%, 10% or 20% increase of generic market shares of the selected medicines. **RESULTS:** The generic market share for elderly in 2010 was 23.1%, while this was 23.7% for the total Belgian population in 2009. Generic market shares for the five most important ATC drug classes (A, B, C, M and N) varied from 8.81% for class B to 63.70% for class A. Market shares of the 20 drugs used in the exercise varied from 1.11% to 96.32%. Increasing market shares of generic medicines could generate savings varying from 1.80% (5% increase) to 6.39% (20% increase) of the public expenditure on originator medicines. In a situation where generic market shares would reach 95%, estimated savings could even be 20.15% of the public expenditure on original medicines for this selection of medicines. **CONCLUSIONS:** The full potential of generic medicines in the elderly population has not yet been realized in Belgium. Additional incentives for physicians, pharmacists and patients are needed as an increased use of generic medicines by elderly could generate significant savings.

PHP24
EMPLOYEE MEDICATION ADHERENCE: PHARMACY CLAIMS ANALYSIS OF AN EMPLOYER-SPONSORED ONSITE HEALTH CENTER

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OBJECTIVES: Due to barriers such as cost, regimen complexity and perceived inefficacy, a substantial percentage of patients do not conform to medical instructions. Onsite health centers with onsite pharmacies may improve medication adherence through convenient, 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 compared 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 subanalysis 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 alternate source: 54.8% versus 50.7%, respectively. In particular, the MPR was significantly (P < 0.002) greater for hypertension patients who used the onsite pharmacy compared with 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 participated 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 UTILIZATION 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 from prescriptions presents a limiting factor 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 diagnosis identification. **RESULTS:** There was good agreement between medication-derived patient disease conditions and medical claims diagnosed conditions while variations existed among selected diseases. When using the medication-derived patient disease condition indicator alone as 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: Polypharmacy, 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 polypharmacy among individuals with multiple chronic physical conditions and compare these to individuals without multimorbidity. We also examine the relationship between polypharmacy and various clusters of conditions to identify the trends of polypharmacy in particular clusters of conditions. **METHODS:** Cross-sectional analysis of 9259 individuals of age above 21, with at least one chronic physical condition in the following clusters: cardio-metabolic consisting of diabetes or heart disease or hypertension, respiratory consisting of chronic obstructive pulmonary disease or asthma and musculoskeletal consisting of osteoarthritis or rheumatoid arthritis or osteoporosis from the 2008 Medical Expenditure Panel Survey (MEPS). Chi-square tests and multivariate logistic regressions were performed to analyze the rates and types of drug use and hence polypharmacy among various chronic clusters. All analysis accounted for the complex survey design of the MEPS.