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the differences were not statistically significant. **CONCLUSION:** Study results largely correspond to previous published estimates (i.e., Trussell, 2004). Contraception failure rates for user-dependent methods were substantially greater in a Medicaid population than those in a non-Medicaid plan. The efficacy rates of non-daily methods were not statistically different across the two populations and thus may be the more appropriate option for a Medicaid patient or other patient subpopulations shown to have compliance issues.

PIH3

HOSPITALIZATIONS AND MORTALITY ASSOCIATED WITH INCIDENT POTENTIALLY INAPPROPRIATE MEDICATIONS USE AMONG ELDERLY INDIANA MEDICAID BENEFICIARIES RESIDING IN NURSING HOMES

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OBJECTIVE: Most studies of potentially inappropriate medications (PIMs) among older adults have focused on prevalence rather than incidence. This study determined one-year incidence of PIMs use among Indiana Medicaid beneficiaries 65 years old or older who resided in nursing homes and examined associations between incident PIM use and hospitalizations and mortality. **METHODS:** A retrospective analysis was conducted using Indiana Medicaid claims and enrollment files. Individuals were included in the sample if they were 65 years old or older, received Medicaid covered nursing home services from October 2002 through 12 months after starting a PIM in 2003 or until death in 2003, and were prescribed at least one new medication in 2003. Individuals who received any PIM in the three months prior to January 2003 were excluded. The 2003 Beers criteria were used to identify PIMs. Associations between incident PIM use, hospitalization and mortality were assessed using logistic regression models that controlled for age, gender, race, marital status, Charlson comorbidity scores, number of medications prescribed in 2003, and nursing home location. Selection bias was examined using seemingly unrelated bivariate probit models. STATA Intercooled for Windows was used for all statistical analyses. **RESULTS:** The study sample consisted of 7594 individuals. One-year incidence PIM use was 42.1%. Rhos, correlations of error terms from equations predicting hospitalizations and mortality, were not significant indicating no selection bias. Incident PIM users were more likely to be hospitalized (odds ratio {OR} = 1.27, 95% C.I. 1.10–1.47) and more likely to die (OR = 1.45, 95% C.I. 1.31–1.61) in 12 months after controlling for demographic and clinical characteristics. **CONCLUSION:** Incidence of PIM prescribing was high among elderly Indiana Medicaid beneficiaries residing in nursing homes. Individuals who began use of a PIM in 2003 were at a higher risk of hospitalization and at higher risk of dying.

PIH4

COMPARISON OF MEN AGE 21 YEARS AND OLDER WITH AND WITHOUT ERECTILE DYSFUNCTION ON CONCOMITANT PRESCRIPTION DRUG, COMORBID CONDITIONS, SMOKING STATUS AND BMI

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OBJECTIVE: Comparison of data collected in a electronic medical record (EMR) database on men age 21 years and older with and without erectile dysfunction (ED) on concomitant drug prescription, co-morbid conditions, smoking status and BMI. **METHODS:** A retrospective review of the General Electric Centricity MQIC research database containing the ambulatory health records of US patients was conducted. ED patients age 21 and older were identified by diagnosis, PDE5 and/or both; ≥18 month of activity and smoking status was required. Two non-ED age-matched (within +/–2 years) controls were randomly selected for and linked to each case. A matched case-control analysis was conducted using conditional logistic regression, with goodness of fit and residual analyses used to test validity and assumptions. **RESULTS:** Non-smokers compared to current smokers were less likely to develop ED. There was an increase odds of ED with each unit increase in BMI. Men with BMI 30–39.9 had the highest risk of ED (2.14 OR, 1.73–2.64 95% CI) compared to those with BMI ≤ 18.5. Antihypertensive, lipid lowering agents and diuretics had the highest relative odds for ED respectively (2.43 OR, 2.34–2.5 95% CI; 1.57 OR, 1.52–1.62 95% CI; 1.44 OR, 1.37–1.5 95% CI). None of the other risk factors or co-morbid conditions (cerebrovascular disease, kidney disease, anti-arrhythmics, and anti-neoplastics) was found to increase the risk of ED. **CONCLUSION:** EMR data provides a means for assessing risk factors for and associated conditions consistent with ED in a real-world setting, including the links between this condition and commonly used prescription drugs. The likelihood of developing ED was less for non-smokers and increased with increasing BMI and the use of antihypertensives, lipid lowering agents and diuretics.

PIH5

THE EFFECT OF INJURY SEVERITY ON THE INCIDENCE AND RESOURCE UTILIZATION-RELATED OUTCOMES OF DEEP VEIN THROMBOSIS AMONG PEDIATRIC TRAUMA ADMISSIONS IN THE UNITED STATES

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OBJECTIVE: To generate national estimates of the effect of injury severity on the incidence and associated resource utilization-related outcomes of deep vein thrombosis (DVT) among pediatric traumatic injury inpatient admissions in the United States. **METHODS:** Data from the 2003 HCUP KID dataset were analyzed for 240,387 hospital stays (unweighted = 146,512) for traumatic injury in patients ≤20 years old. Among these hospitalizations, cases of DVT were identified. Injury severity scores (ISS) were calculated using the ICDMAP90 software; four mutually exclusive categories corresponding to increasing severity were created. Weighted regression models estimated the effect of injury severity on the likelihood of DVT, controlling for patient- and hospital-specific characteristics. Additional models including interaction terms for DVT/injury severity category estimated the joint effect of these parameters on total costs and LOS. **RESULTS:** Among traumatic injuries identified, 648 patients (0.27%) had an ICD-9-CM code consistent with DVT, similar to previous estimates in the literature. Among observations with complete data, moderate [ISS = 9–15], severe [ISS = 16–24] and critical [ISS = 25+]) injuries increased the likelihood of DVT (Odds Ratio [p-value] = 2.13 [<0.0001], 2.49 [0.0001], and 3.53 [<0.0001], respectively), as compared to minor injuries (ISS = 0–8). Relative to minor injuries, severe and critical injuries among those with DVT (i.e., interactive effects) were associated with increased LOS. DVT and increasing severity each independently increased total costs, but interactive effects were not significant. **CONCLUSION:** In this study we quantify the effect of injury severity on the incidence and utilization-related outcomes of DVT among

those with traumatic injury in a multi-payer US population. Increasing severity appears to increase the likelihood of developing a DVT. Further, new interventions that mitigate the development of DVT may reduce the economic burden of traumatic injury among pediatric hospitalizations. Clinicians and other decision makers should be aware of the relationship between injury severity and DVT development and resource utilization-associated outcomes.

INDIVIDUAL'S HEALTH—Cost Studies

PIH6

ECONOMIC ASSESSMENT OF SILDAFENIL FOR THE MANAGEMENT OF PATIENTS WITH ERECTILE DYSFUNCTION (ED) SECONDARY TO DIABETES MELLITUS TYPE 2 (DM2) AND HYPERTENSION IN MEXICO

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OBJECTIVE: Medications used to control DM2 and hypertension are common associated with ED problems. This had affected adherence and therefore the long-term control of Mexican patients with those diseases, increasing long-term complications and health care costs. The purpose of the study was to evaluate the cost-effectiveness of using ED treatments as adjuvant therapies in patients with DM2 and hypertension from an institutional perspective. **METHODS:** A cost-effectiveness assessment was performed employing a ten-years decision tree model. Comparators used in the model were Sildenafil (50 mg/day-100 mg/day); Taladafil (20 mg/day) and Vardenafil (10 mg/day-20 mg/day). Effectiveness measure used was the number of hospitalization avoided related to uncontrolled-patients due to ED causes. The transition probabilities were obtained from international published literature and a local survey, previously validated, related to ED problems in Mexican patients(n = 146 with DM2; n = 326 with hypertension) at multiple second-level Hospitals within the Social Security Mexican Institute (IMSS). Resource use data was obtained from hospital records(n = 1000) and a 3% discount rate was used. The model was calibrated according to international guidelines. Probabilistic sensitivity analyses were performed using bootstrapping techniques. **RESULTS:** Savings per patient with DM2 were US$816.70 for sildenafil 50 mg/day; US$668.30 for sildenafil 100 mg/day; US$711.20 for tadalafil; US$646.30 for vardenafil 10 mg/day and US$603.50 for vardenafil 20 mg/day. Annual mean savings per patient with hypertension resulted in US$1627.00; US$1447.50, US$1520.80, US$1444.50 and US$1432.20; respectively following the order above. Patients treated with ED therapies avoided significant number of hospitalizations (complications) in both diseases and sildenafil 50 mg/day was the therapy which showed the higher number of hospitalizations avoided(23 for DM2 and 25 for hypertension). ICER's showed Sildenafil 50 mg/day as the dominant treatment. The results were robust to probabilistic sensitivity analyses and acceptability curves. **CONCLUSION:** ED therapies should be employed in males who show this problem secondary to DM2 and hypertension. These results could be used by Mexican decision-makers to generate cost-containment strategies.

PIH7

BURDEN OF ILLNESS OF HYPERTENSION AMONG WOMEN USING MENOPAUSAL HORMONE THERAPY

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OBJECTIVE: High blood pressure is common in menopausal women and some hormone therapies (HT) for menopause may contribute to increased blood pressure. However, the burden of illness (BOI) of hypertension in women receiving menopausal HT is not well-documented in the current literature. This study estimates the prevalence and economic burden of hypertension in this patient population. **METHODS:** Patients with at least one prescription for menopausal HT were selected from the PharMetrics database during the period from July 1, 2003–June 30, 2005. HT patients were divided into those with and without hypertension. The non-hypertensive cohort was propensity score matched to the hypertensive cohort, controlling for patient demographics, overall comorbidities, and type of HT use. The BOI of hypertension was defined as the difference in average annual total health care expenditures per person between the cohorts. **RESULTS:** The prevalence of menopausal HT use was 9.75% among potentially eligible patients in this commercially-insured sample. Hypertension was the most common comorbidity, with a prevalence of 34%. HT patients with hypertension (n = 106,729) had significantly higher average annual health care expenditures compared with matched HT patients without hypertension ($8,908 versus $5,960; difference of $2,948; $P < 0.001$). Less than 1% was due to differences in menopause-related care between the cohorts; 54% was attributable to hypertension-related care and 45% to the care of other common comorbidities, such as lipid disorders. **CONCLUSION:** Hypertension is the most common comorbidity among commercially-insured menopausal hormone therapy users in the United States. The annual incremental BOI of hypertension among HT users is both substantial and statistically significant, averaging $2,948 per patient per year. Given the number of menopausal women who use HT and the prevalence of hypertension in this cohort, employers and medical care payers should be interested in finding ways to lessen the burden associated with hypertension.

PIH8

COST-EFFECTIVENESS OF ORAL AND TRANSDERMAL CONTRACEPTIVES

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OBJECTIVE: In Ukraine the State program «Reproductive health of the nation for the period till 2015», providing reduction in the quantity of abortions is authorized, using hormonal contraception. The aim was to identify the most cost-effective oral or transdermal contraceptives using a provider perspective. **METHODS:** A decision tree was developed to compare the cost-effectiveness of oral contraceptive 3 mg drospirenone/0.03 mg ethinylestradiol (D-E) vs. 0.25 mg norgestimate/0.035 mg ethynilestradiol (NA-E) vs. transdermal contraceptive 6 mg norelgestromin/0.6 mg ethynilestradiol (transdermal N-E) for preventing a pregnancy per patient per year. Direct medical cost were based on average wholesale prices for medicines (01.10.2007), ans physician, laboratory costs based on tariffs of Lviv family planning center. Probability data that included compliance and pregnancy rates were extracted from randomized clinical trials and public resources. A probablistic sensitivity analysis of free parameters was conducted through a Monte-Carlo simulation. Key parameters were sampled from beta