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**

Dedhiya S1, Craig B2, Sands L2, Thomas III J1

1Purdue University, West Lafayette, IN, USA, 2Purdue University, Regenstrief Center for Healthcare Engineering, Center for Health Outcomes Research and Policy, West Lafayette, IN, USA

**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% CI: 1.10–1.47) and more likely to die (OR = 1.45, 95% CI: 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.

**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**

Candrilli SD1, Balkrishnan R1, O’Brien S2

1The Ohio State University, Columbus, OH, USA, 2The Research Institute at Nationwide Children’s Hospital, Columbus, OH, USA

**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. METHODOLOGY: 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 ICDMAPP90 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

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

Arreola-Ornelas H1, Dorantes-Aguilar J1, García-Mollinedo ML1, Rosado-Buzzo AA2, Mould-Quevedo J3, Davila-Loaiza G3

1Fundación Mexicana para la Salud, Funsalud, Mexico City, Mexico, 2Links & Links S.A. de C.V, Mexico City, Mexico, 3Pfizer Mexico, Mexico City, Mexico

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); Tadalafil (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.

HYPERTENSION IN MEXICO:

MANAGEMENT OF PATIENTS WITH ERECTILE DYSFUNCTION

ECONOMIC ASSESSMENT OF SILDAFENIL FOR THE

CONCLUSION:

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.

COST-EFFECTIVENESS OF ORAL AND TRANSDERMAL CONTRACEPTIVES

Zeliska O, Pushak K

Lviv National Medical University Named Danylo Galitsky, Lviv, Ukraine

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 norgestemate/0.035 mg ethinylestradiol (NA-E) vs. transdermal contraceptive 6 mg norelgestromin/0.6 mg ethinylestradiol (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 probabilistic sensitivity analysis of free parameters was conducted through a Monte-Carlo simulation. Key parameters were sampled from beta distribution and a 3% discount rate was used in all analysis. RESULTS: Savings per patient were US$451.70 for drospirenone/ethinylestradiol vs. US$383.00 for norgestemate/ethinylestradiol and US$451.70 for transdermal contraceptive. ANOVA with Bonferroni correction was used for statistical analysis. CONCLUSION: There is no statistically significant differences between oral contraceptives, but savings per patient are higher for drospirenone/ethinylestradiol compared to norgestemate/ethinylestradiol. The cost-effectiveness of transdermal contraceptive was not included in the analysis due to higher pregnancy rate.