

year was considered. Base case model outputs were total cost, cost per member per month (PMPM) and number of UP. **RESULTS:** In a hypothetical cohort of 1 million plan members, the model estimated reductions of \$460,552USD in total costs, \$0.03USD in PMPM costs, and 119 in UP. **CONCLUSIONS:** Switching SARC method users to LNG-IUS-12 in a US health care plan may result in fewer UP and an overall cost savings to the plan.

PIH13

ECONOMIC CONSIDERATIONS FOR MID-URETHRAL SLING PROCEDURES AMONG PATIENTS WITH STRESS URINARY INCONTINENCE

Roy S¹, Bramley T², Hinoul P³, Li H⁴

¹Johnson and Johnson Global Surgery Group, Somerville, NJ, USA, ²Xcenda, LLC, Palm Harbor, FL, USA, ³Johnson and Johnson (Ethicon, Inc.), Somerville, NJ, USA, ⁴Xcenda, Palm Harbor, FL, USA

OBJECTIVES: Stress urinary incontinence (SUI) is associated with a hefty economic burden. Mid-urethral slings have become common surgical options for women with SUI. This study examines the costs of transobturator slings for SUI surgeries. **METHODS:** A model was created to estimate the budget impact to hospitals of transobturator sling surgery in women with SUI. Current practice using transobturator slings including the Monarc™ Subfascial Hammock, Obtryx® Transobturator Mid-Urethral Sling System, Aris® Transobturator Sling System, Align® TO Trans-Obturator Urethral Support System, Desara® Sling System, Gynecare TVT™ Obturator System Tension-free Support for Incontinence and Gynecare TVT Abbrevio™ Continence System were modeled. Four surgical complications were also considered: re-operation due to failure, revision or removal of sling, urologic complications including urinary obstruction and urinary tract infection, and pelvic complications. This model calculates the average one-year cost per patient with the use of each sling product and predicts the total budget for sling urinary incontinence surgery associated with each product based on these estimates. **RESULTS:** Average combined cost of the sling and for management of complications over one year ranged from \$2,666 (Gynecare TVT™ Obturator) to \$3,213 (Desara®) per patient. With the current market share for transobturator sling products, the expected expenditure is around \$293,669 for a hypothetical surgical population of 100 patients. Sling costs account for approximately \$105,526 (36%) of this cost with complications making up the remainder. While cost of Gynecare slings are not the least, increase in the share of use of these slings resulted in lowering of overall expenditure. **CONCLUSIONS:** This study represents the first comparative assessment of the costs of different sling options for SUI surgeries. Gynecare transobturator slings represent a sound economic choice for hospitals with an expected reduction in overall expenditure compared with others. Moreover, such reduction is obtained at the benefit of patients who experience fewer complications.

PIH14

BUDGET IMPACT ANALYSIS OF THE USE OF TOBRAMYCIN INHALATION POWDER (TIP) FOR THE TREATMENT OF CHRONIC PSEUDOMONAS AERUGINOSA (PA) INFECTION IN PATIENTS WITH CYSTIC FIBROSIS AGED ≥ 6 YEARS IN MEXICO

Lemus A¹, Rosas J²

¹Novartis, Mexico City, Mexico, ²ESEAC Consultores, Mexico City, Mexico

OBJECTIVES: To estimate the budget impact analysis of replacing Tobramycin Inhalation Solution (TIS) by TIP in the public health care system. **METHODS:** A financial cash flow of treatment, concomitant treatment (ciprofloxacin) was estimated using TIP instead of TIS in the 315 patients currently identified receiving treatment. Efficacy is the same between the two presentations (Konstan, 2011); adverse events do not represent additional costs. However the time needed to nebulization treatment, and device cleaning is longer with TIS: 28 and 33 minutes more per day, respectively. Therefore a societal impact is estimated using the societal time value for economic evaluations of US\$2.64 hour. (ER 1US\$=13MX\$). **RESULTS:** The cycle cost per patient of TIS=US\$2269.23 and TIP=US\$2155.76. The annual 6-cycles cost is US\$13,617.81 for TIS and US\$12,937.21 for TIP. Savings account for US\$680.52 per patient (5%). The Health System could be saving US\$214,442.30. The difference in the hours invested to drug administration between TIS and TIP is 78.4 hours-year, and the difference for cleaning the device is 92.4 hours-year, less for TIP in both cases. Economically, it represents an incremental societal investment of using TIS of \$1798 per patient a year. **CONCLUSIONS:** The time burden to receive treatment in CF is huge. Patients spend around 2 hours a day. TIP represents an opportunity for saving both health care resources, and valuable time to patients, and caregivers.

PIH15

COST SAVINGS AND COST-EFFECTIVENESS OF THE CONTRACEPTIVE MANDATE IN THE PATIENT PROTECTION AND AFFORDABLE CARE ACT

Montouchet C, Hart P

Medaxial Group, London, UK

OBJECTIVES: Health economic analyses have shown that providing free contraceptive cover leads to cost savings of 15–17% when considering the cost of managing unintended pregnancies and their outcomes. The US Patient Protection and Affordable Care Act (PPACA) mandates employers to include contraceptives in their employees' health care coverage at no out-of-pocket cost to women. This model estimates the budget impact and cost-effectiveness to the US health care system of providing this coverage to women across different employment and insurance settings. **METHODS:** An age-specific Markov model was developed for women aged 15–44, using data from the US Census Bureau and National Survey of Family Growth. The model explored direct medical costs associated with contraceptive coverage. The direct medical costs of unintended

pregnancy (live birth, abortion, miscarriage and ectopic pregnancy) were sourced from published literature identified using PubMed. The model considered the impact of altered contraceptive use associated with free coverage (using data from the CHOICE study), and accounted for differences in efficacy between these modalities. **RESULTS:** The model showed that savings may be realised by the US health care system when contraceptives are provided free of charge to women at risk of unintended pregnancy, a strategy which remained cost-effective over a variety of sensitivity analyses. Key drivers of savings included the tenfold increase in recourse to long-acting reversible contraceptive methods, which led to a three- and five-fold decrease in unintended pregnancies and associated medical costs, respectively. **CONCLUSIONS:** This model is the first to estimate the impact, to the US health care system, of the PPACA mandate for free contraception, accounting for revised contraceptive usage when coverage is provided with no out-of-pocket costs. Findings suggest that providing contraception free of charge is cost-effective and cost-saving for the US health care system, and could be even more so were indirect and intangible costs considered.

PIH16

HEALTH ECONOMICS ASSESSMENT OF ROTAVIRUS VACCINES IN MEXICO

Carlos F¹, Gomez JA², Anaya P³, Standaert B⁴, Carreño-Manjarrez R⁵

¹R A C Salud Consultores S.A. de C.V., Mexico City, Mexico, ²GlaxoSmithKline, Victoria, Argentina, ³GlaxoSmithKline Mexico, Mexico City, D.F., Mexico, ⁴GlaxoSmithKline Biologicals, Wavre, Belgium

OBJECTIVES: Rotavirus (RV) is the leading cause of severe gastroenteritis in infants and young children worldwide. We aimed to assess the cost-effectiveness of two different RV vaccines in Mexico. **METHODS:** The analysis was conducted by calibrating a previously published deterministic Markov model with existing national data. Competing alternatives included routine immunization with a two-dose (2d: first/second dose at 2/4 months of age) or a three-dose (3d: first/second/third dose at 2/4/6 months of age) schemes besides the non-vaccination strategy. The model simulated the vaccines effect at vaccine steady-state condition over a period of 5 years under the perspective of Mexican public health care system. Direct medical costs comprising both acquisition and administration of RV vaccines as well as treatment of emerging RV infections were assessed. Costs are expressed in 2012 Mexican pesos (MXN). It was assumed that once completed, both vaccines are equally effective. Therefore, compliance and efficacy per each dose were incorporated into the analysis. Utility scores were obtained from literature. A 5% annual discount rate was applied. **RESULTS:** Without vaccination 760,559 cumulative RV events are expected for the 2012 birth cohort, entailing direct medical costs of 529.3 million MXN and a loss of 5,036 quality-adjusted life years (QALY). The two-dose scheme reduced RV events (39%), frequency of cases seeking medical advice (58%) and hospital admissions due to RV (67%). For 3d, these reductions were 30%, 45% and 53%, respectively. When compared to non-vaccination, the costs per additional QALY gained were \$26,408 MXN (2d) and \$69,325 MXN (3d). 2d was associated with net savings of 74 million MXN (11%) plus a gain of 553 QALY with respect to 3d. Sensitivity analysis showed model is robust. **CONCLUSIONS:** These results suggest routine immunization against RV with either 2d or 3d is a highly cost-effective intervention in Mexico. Among the vaccines, 2d was dominant.

PIH17

RETROSPECTIVE DATABASE ANALYSIS OF CLINICAL OUTCOMES AND COSTS FOR TREATMENT OF MENORRHAGIA AMONG WOMEN ENROLLED IN MEDICAID PROGRAMS IN THE UNITED STATES

Bonafede MM, Miller J, Meyer NM, Lenhart GM

Truven Health Analytics, Cambridge, MA, USA

OBJECTIVES: To describe the costs and clinical outcomes of global endometrial ablation (GEA) and hysterectomy for the treatment of menorrhagia among women insured through Medicaid programs. **METHODS:** The Truven Health MarketScan® Medicaid Multi-State Database was used to identify Medicaid recipients aged 30-55 years with diagnosed menorrhagia who initiated treatment for menorrhagia with GEA or hysterectomy during 2006-2010. Patients were required to have 12 months of continuous enrollment pre- and post-treatment initiation (index event). Baseline characteristics were assessed in the year prior to treatment initiation. Health care utilization and costs (2011 USD) were assessed in the year following treatment initiation. **RESULTS:** A total of 1880 women met the study criteria (mean age=40.7); approximately one-half (53.4%) were Caucasian, 33.1% were African-American, and 2.3% were Hispanic. Nearly one-half (42.8%) of the women received their Medicaid eligibility due to disability. Slightly more patients received GEA (50.9%) than hysterectomy (49.1%). Both GEA and hysterectomy patients had similar baseline Deyo-Charlson Comorbidity scores (0.65) and similar baseline use of anti-biotics (69.4%), non-steroidal anti-inflammatory drugs (56.3%), or oral contraceptives (5.3%). More than one-half (52%) of hysterectomy patients had a treatment-related complication, compared to 36% of GEA patients (p<0.0001). Index treatment costs plus 30-day follow-up costs were higher for hysterectomy (\$11,270) than for GEA (\$3,958, p<0.0001). Gynecologic-related costs in the remainder of the year were \$694 for hysterectomy and \$175 for GEA (p=0.14). Nearly all GEA (93%) procedures occurred in an outpatient setting while 87% of hysterectomies occurred in an inpatient setting. **CONCLUSIONS:** Hysterectomy and related post-operative costs were nearly 3 times higher than GEA costs for the treatment of menorrhagia. These results and others from this study are timely, as new federal mandates for Medicaid expansion are likely to focus on outpatient treatments as ways to reduce Medicaid costs.