etc. The unit of measurement was cost per successful treatment. Differences in costs and efficacy rates were analyzed by the appropriate statistical tools. The study was performed from a government's perspective. **RESULTS:** A total of 44 patients were evenly randomised to receive LNG-IUS treatment and TBEA and evaluation was performed 1 year after treatment. Of these, 18 patients from the LNG-IUS group completed the study with 3 dropouts. Ten achieved menorrhagic control and 5 had to be converted to other therapies. In patients receiving TBEA therapy, 7 dropped out and 15 were deemed successful. The overall cost of treatment for LNG-IUS and TBEA groups was HKD140,000 (USD18,000; 1USD = 7.8HKD) and HKD430,000 (USD55,000) respectively. The average cost per successful treatment per patient was therefore HKD14,000 (USD1,800) and HKD28,600 (USD3,660) for the LNG-IUS and TBEA patients respectively. **CONCLUSIONS:** From this small group of patients enrolled in a clinical trial to assess the outcomes of LNG-IUS and TBEA, it appears that the LNG-IUS therapy is more cost-effective. The major cost drivers appear to be the procedural and hospitalization costs arising from TBEA.

PIH17

COST/EFFECTIVENESS STUDY OF CLOMIPHENE CITRATE VERSUS ANASTROZOLE IN THE INDUCTION OF OVULATION IN BARREN ADULT PATIENTS AT A MEXICAN PUBLIC HOSPITAL

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OBJECTIVES: To evaluate the costs and effectiveness of the conventional drug treatment with clomiphene citrate versus anastrozole in the induction of the ovulation in infertile adult patients attending a Mexican public hospital. **METHODS:** A prospective and descriptive clinical pilot study was conducted in a Mexican public hospital "La Raza" of the Mexican Social Security Institute (IMSS). Thirty adult patients with infertility due to anovulation were recruited and grouped into two groups. Group A was treated with clomiphene citrate and group B with anastrozole for 6 months. A systematic scientific review of the published literature related with the two drugs was done, in order to gather the drug efficacy and adverse effects probabilities. The drug efficacies gathered in the Mexican clinical pilot study and the efficacy data from the literature review were analyzed by means of meta-analysis. The direct medical and non direct medical costs as well as the indirect costs were assessed using a micro-costing process. Using the Mexican women epidemiological data a hypothetic population of 10000 was considered. A time horizon of one year was estimated. The Markov-Montecarlo model-computarized TreeAge Program was used in order to evaluate the cost-effectiveness (CE) ratio. The discount rate, incremental and marginal analyses were done. **RESULTS:** The meta-analysis odds ratio was 0.85 for the ovulation induction and 1.46 for pregnancy. The most CE treatment was clomiphene citrate with a ratio of $173 dollars/QALY versus $192 of anastrozole. The result of the incremental analysis was $18 dollars/QALY. **CONCLUSIONS:** The conventional drug treatment (clomiphene) is the most cost/effective for the present study population. Further investigations are needed in order to assess the costs of adverse events in order to obtain conclusive data.

PIH18

A COST EFFECTIVENESS ANALYSIS OF A GENERAL VACCINATION PROGRAMME WITH THE NEW 10-VALENT PNEUMOCOCCAL NON-TYPEABLE HAEMOPHILUS INFLUENZAE PROTEIN-D CONJUGATE VACCINE (PHID-CV) IN SWEDEN

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OBJECTIVES: To estimate the expected health benefits, costs and incremental cost-effectiveness ratio of routine vaccination with the new 10-valent pneumococcal non-typeable haemophilus influenzae protein-D conjugate vaccine (PHiD-CV) compared with no vaccination and the currently available 7-valent pneumococcal conjugate vaccine (PCV-7) in Sweden. **METHODS:** A cross-sectional population model was used to estimate the impact of vaccination over 1-year at vaccine steady-state and to perform an incremental cost-effectiveness analysis, comparing 3 different vaccination strategies. The base-case analysis was performed from a societal perspective, using a 3 dose (2 + 1) vaccination schedule. The effects of herd-protection, serotype replacement and serotype cross-protection were calculated separately. The main outcomes were measured by reduction in the disease burden, costs, QALYs and incremental cost-effectiveness ratio (ICER) per QALY gained. Sensitivity analyses were performed to evaluate the robustness of the model. **RESULTS:** Preliminary results indicate that PHiD-CV could prevent a considerable number of pneumococcal infections- particularly acute otitis media. Annual health care costs (vaccine costs excluded) and indirect costs with PHiD-CV are estimated at 10% and 12% lower than with the no vaccination strategy, and 6% and 7 % lower, than with PCV-7. Expected QALY gain from vaccination is twofold compared with PCV-7. At price-parity, health benefits of vaccination can be achieved with a "low cost" per QALY (<€10, 000) compared with no vaccination and the estimated mean differences in cost and QALYs indicate that PHiD-CV dominates PCV-7. PHiD-CV was predicted to prevent 18,000 more antibiotic prescriptions than PCV-7. Sensitivity analyses show that the results are most sensitive to changes in parameters related to AOM. **CONCLUSIONS:** Our preliminary results indicate that the health benefits of vaccination with PHiD-CV compared with no

vaccination and PCV-7 can be achieved within a "low cost" per QALY gained, according to the Swedish National Board of Health and Welfare's ranking.

PIH19

EXPANDED NEWBORN SCREENING IN TEXAS: A COST-EFFECTIVENESS ANALYSIS USING MARKOV MODELING

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OBJECTIVES: Texas House Bill 790 resulted in the expansion of the newborn screening panel from 7 to 27 disorders. The objective of this study was to estimate the incremental cost-effectiveness of the expanded newborn screening program (27 disorders) compared to the previous standard screening (7 disorders) in Texas. **METHODS:** A Markov model (for a hypothetical cohort of Texas births in 2007) was constructed to compare life-time costs and QALYs between the expanded newborn screening and pre-expansion newborn screening. Estimates of costs, probabilities of sequelae, and utilities for disorder categories were obtained from Texas statistics, the literature, and expert opinion. A baseline discount rate of 3% was used for both costs and QALYs, with a range of 0% to 5%. Analyses were conducted from a payer's perspective, so only direct medical cost estimates were included. **RESULTS:** The life-time incremental cost-effectiveness ratio (ICER) for expanded versus pre-expansion screening was about $11,000/QALY. Probabilistic sensitivity analysis using key variables showed that results ranged from about $9,500 to $13,000 /QALY. This range is well below the commonly cited willingness to pay threshold of $50,000/QALY. **CONCLUSIONS:** Expanded newborn screening does result in additional expense to the payer but also improves patient outcomes by preventing avoidable morbidity and mortality. The screened population benefits from greater QALYs as compared to the unscreened population. Overall, expanded newborn screening in Texas was estimated to be a cost-effective option as compared to unexpanded newborn screening.

PIH20

INCREMENTAL COST OF OTITIS MEDIA AMONG CHILDREN IN THE UNITED STATES

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OBJECTIVES: Recent estimates of cost of otitis media (OM) among children in the United States are not available. The objective of this study was to estimate the incremental direct medical expenditures of treating OM among children in the United States. **METHODS:** Retrospective analysis was conducted using the 2005 Medical Expenditure Panel Survey (MEPS) data. Among all children (age < 18 years; n = 9691), children with OM were identified using International Classification of Diseases (ICD)-9 diagnosis codes 381 or 382 for OM. Incremental total expenditures associated with OM was estimated using a regression model adjusting for age, gender, race, ethnicity, education, geographic region, insurance status and number of medications used (proxy for comorbidity). Given the skewed distribution of expenditure variables, multiple model specifications including ordinary least squares regression, generalized linear model (GLM) with Poisson, gamma and negative binomial variance functions were evaluated. **RESULTS:** The prevalence of OM among children in the US was estimated at 11.08%, i.e., 8.15 million persons (95% CI: 10.28% to 11.94%). A majority of children with OM were male (52.3%), white (85.7%), and insured (97.3%) with mean age of 5.2 ± 0.16 years and education of 1.0 ± 0.09 years. In unadjusted analysis among patients with OM, inpatient visits was the largest proportion of the total expenditures at $708.97 (SE: $384.25), followed by physician office visits at $646.35 (SE: 48.07), outpatient visits at $370.88 (SE: $167.97), and prescription medications at $348.39 (SE: $122.26). After controlling for covariates, children with OM had 25% higher total expenditures than those without OM (Estimate: 1.25; p = 0.024). The annual adjusted mean incremental total expenditure associated with OM was $245.6 (SE: $117.4; p = 0.036) per person. **CONCLUSIONS:** Given the prevalence of OM in children and its associated incremental expenditures, the annual direct medical expenditure for treating OM in children is estimated at approximately $2 billion in 2007 US dollars.

PIH21

DRIVERS OF HEALTH CARE COSTS IN WOMEN WITH HYPOACTIVE SEXUAL DESIRE DISORDER (HSDD)

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OBJECTIVES: To describe the drivers of health care costs among commercially insured women in the United States with a diagnosis of Hypoactive Sexual Desire Disorder (HSDD). **METHODS:** The Thomson Reuters Marketscan® Claims Database was used to identify women aged 18–64 who received a diagnosis of HSDD from january 1, 1998-September 30, 2006. A control group of women with no indication of any sexual dysfunction was matched 3:1 to HSDD cases based on age, health plan and enrollment period. Controls were assigned the index date of their matched case. Total health care expenditures were evaluated for the one-year prior to and following the index date and were categorized by type of service (inpatient, outpatient medical, outpatient other, prescription). Outpatient medical services included office visits, laboratory and outpatient procedures; radiology and behavioral health services were categorized as "outpatient other". **RESULTS:** A total of 2870 women were coded with an HSDD diagnosis and matched to 8610 controls. In the year prior to index, the HSDD group incurred total health care costs that were $1146 higher (p < 0.001); in