COST ANALYSIS OF TOTAL PARENTERAL NUTRITION IN THE NEONATAL AND PIH11 higher healthcare resource utilization and costs. In a matched-cohort study, a diagnosis of HMB was associated with significantly higher resource-utilization and resource costs; bottom-up costing was used to assign a monetary value using published list-prices. Costs of hospital PN-therapy were calculated from hospitals in 4 countries (Belgium, France, Germany, and UK) about resource-utilization annually. Data were collected via literature review and face-to-face interviews in 12 hospitals piloted in 3 Belgian hospitals, with a total of 763 patients and 7,488 compounded bags. Despite efforts to decrease the incidence of low birth weight (LBW) and pre-term births, LBW/pre-term infants, rates of which 45% were attributed to ingredients and 35% to wage-costs, respectfully. The data showed that a significant proportion of the total cost of PN was attributable to ingredients and wages. Average annual costs of hospitalization for LBW/pre-term infants (any diagnosis with an ICD-9-CM code of 764.xx, 765.xx, and V21.3x), uncomplicated newborn stays (primary diagnosis with an ICD-9-CM code between V30 and V39.2), and all other infant stays. LBW/pre-term stays were stratified by infants weighing less than or greater than 2,500 grams. Study measures included weighed and unweighted demographics, hospital characteristics, length of stay (LOS), and costs. RESULTS: In 2008 there were 499,473 stays for LBW/pre-term infants, representing 10% of all infant stays. The average LOS for LBW/pre-term infants was 11.9 days, versus 2.3 days among infants with an uncomplicated newborn stay, and 4.2 days among all other infant stays. LBW/pre-term infant stays resulted in costs of more than $9.7 billion, or approximately 45% of all costs for all infant stays, and nearly 1.7 times the costs of uncomplicated newborn stays. Patients with a birth weight less than 2,500 grams had costs that were approximately 3.9 times greater than costs for patients with a birth weight greater than 2,500 grams [mean [SE] $23,382 [$1,220] versus $5,951 [350] among patients with a birth weight less than versus greater than 2,500 grams, respectively). CONCLUSIONS: While LBW/pre-term infant stays represent a small percentage of all infant hospitalizations, they accrue almost half of all inpatient costs among infants.

PIH13 THE COST-EFFECTIVENESS OF THE LNVONORGESTREL-RELEASING INTRAUTERINE SYSTEM (LNG-IUS, MIRENA®) FOR THE TREATMENT OF HEAVY MENSTRUAL BLEEDING IN THE UNITED STATES Meyers J1,2, Shah D1,2, Gadwam R3,4, Filonenko A5,6, Fuchs J7, Law A8,9
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OBJECTIVES: To evaluate the cost-effectiveness of the LNG-IUS compared with other therapies for the treatment of heavy menstrual bleeding (HMB) in the United States (US). METHODS: A microsimulation model examined the five-year treatment experiences of 1,000 hypothetical women with HMB from a US payer perspective. Two years of treatment with LNG-IUS, four oral agents (generic combined oral contraceptives [COCs], branded COCs, oral progestogens, or transaxenic acid) or surgery (endometrial ablation or hysterectomy). Women who failed a non-surgical treatment line could switch to another non-surgical or surgical therapy (up to three non-surgical treatment lines were allowed). Women who failed all non-surgical treatment lines had the option of surgery as a fourth-line treatment. Treatment success was defined as menstrual blood loss < 80 milliliters per menstrual cycle (data were obtained from recent literature). Women could also experience amenorrhea, unintended pregnancy, or discontinuation of the treatment line (probabilities of these events varied by treatment). Response to treatment was evaluated every three months. The outcome of interest was cost per hysterectomy avoided. Robustness of model results was tested in Monte Carlo probabilistic sensitivity analyses. RESULTS: Initiating HMB treatment with LNG-IUS dominated all other strategies: it was the least costly ($1,253 per woman) and resulted in fewer hysterectomies (6 per 1,000 women) compared with the other strategies (costs ranged from $2,291 for generic COCs to $18,219 for hysterectomies; number of hysterectomies per 1,000 women ranged from 9 to abortion to 96 for progesterone). Two years of treatment with LNG-IUS was less costly by any treatment other treatments, except for abortion, which was more costly but more effective than LNG-IUS. Sensitivity analyses confirmed these results. CONCLUSIONS: Initiating treatment after five years with LNG-IUS results in fewer hysterectomies and is a cost-effective alternative treatment for HMB compared with strategies beginning with oral therapies or surgery.

PIH14 PROJECTING THE POTENTIAL COST-EFFECTIVENESS OF UNIVERSAL ACCESS TO MODERN CONTRACEPTIVES IN UGANDA Babagumura P1, Alexander S2,3,4,5
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OBJECTIVES: Over two thirds of women who need contraception in Uganda lack access to modern effective methods. This study was conducted to estimate the potential cost-effectiveness of achieving universal access to modern contraceptives in Uganda by implementing a hypothetical New Contraceptive Program (NCP) from both societal and governmental perspectives. METHODS: A Markov model was developed to compare the NCP to the status quo or Current Contraceptive Program (CCP). The model followed a hypothetical cohort of 15-year old girls over a lifetime horizon. Data were obtained from the Uganda Demographic and Health Survey and from published and unpublished sources. Costs, life expectancy, disability-adjusted life expectancy, pregnancies, fertility and incremental cost-effectiveness measures as cost per life-year (LY) gained, cost per disability-adjusted life-year (DALY) averted, cost per pregnancy averted and cost per unit of fertility reduction were calculated. Univariate and probabilistic sensitivity analyses were performed to examine the robustness of results. RESULTS: Mean discounted life expectancy and disability-adjusted life expectancy (DALE) were higher under the NCP vs. CCP (28.74 vs. 28.65 years and 27.38 vs. 27.01 respectively). Mean pregnancies and years of fertility were lower for the NCP (90.16 and 60.92 vs. 5.27 respectively). Mean lifetime societal costs per woman were higher for the NCP from the societal perspective (1,074 vs. $1,041) and the governmental perspective ($448 vs. $397). The incremental cost-effectiveness ratio comparing the NCP to the CCP was $3,009 per DALY averted ( Incremental cost-effectiveness measures are cost per unit of societal, governmental perspective). The results were robust to univariate and probabilistic sensitivity analysis. CONCLUSIONS: Universal access to modern contraceptives in Uganda appears to be highly cost-effective. Increasing contraceptive coverage should be considered among Uganda’s public health priorities.