PEDIATRIC CARE IN BELGIAN HOSPITALS

BACKGROUND:
Healthcare resource utilization and costs have been well documented. This study evaluated the healthcare resource utilization, work productivity loss, and costs associated with newly diagnosed HMB using a large employer database. METHODS: An analysis was conducted of health insurance claims data (1998-2009) from 40 self-insured companies across the US. Women aged 18-52 years with ≤2 diagnosis claims of HMB (ICD-9: 626.2, 627.0) within 6 months of the first visit were matched 1:1 with controls (no-HMB) based on exact matching factors and propensity scores. Exclusion criteria included diagnosis of cancer, pregnancy/delivery, clinician-identified uterine conditions, endometrial ablation or hysterectomy, diagnosis of organic causes of HMB, and dispensing of anticoagulant medications. All-cause healthcare resource utilization and costs were compared between the HMB and no-HMB cohorts using statistical methods accounting for matched study design. RESULTS: The HMB and no-HMB cohorts (31,038 women in each group) were well-matched with respect to age, year of index date, region, comorbidities, and baseline characteristics. During follow-up, HMB patients had significantly higher all-cause resource utilization than no-HMB patients (hospitalization: incidence rate ratio [IRR] = 2.68, 95% CI 2.59-2.76, p < 0.001; emergency room: IRR = 1.36, 95% CI 1.33-1.40, p < 0.001; outpatient: IRR = 1.29, 95% CI 1.28-1.29, p < 0.001). Average annual per-woman (> year) all-cause healthcare and work productivity cost loss was 35% greater for HMB than for no-HMB patients ($6,275 vs. $3,740, cost difference $2,535, p < 0.001). Costs associated with HMB claims represented 50% ($1,261) of the all-cause cost difference between the two cohorts. The most prevalent initial treatment following diagnosis of HMB was endometrial ablation (45% of patients). CONCLUSIONS: In this large matched-cohort study, a diagnosis of HMB was associated with significantly higher healthcare resource utilization and costs.

CONCLUSIONS:
Despite efforts to decrease the incidence of low birth weight (LBW) and pre-term infants, rates for these conditions have continued to rise in recent years. This study was performed to examine the recent prevention of and burden associated with hospitalizations among LBW and pre-term infants in the United States (US). METHODS: This study used data from the 2008 Healthcare Cost and Utilization Project Nationwide Inpatient Sample. Hospital stays were selected from both societal and governmental perspectives. The results were robust to univariate and probabilistic sensitivity analyses. MATERIALS AND METHODS: A microsimulation model examined the five-year treat- ment experiences of 1,000 hypothetical women with HMB from a US payer perspective. The model could begin treatment at any time (when the woman was overweight) and could include oral contraceptives (OCs), branded OCs, oral progestogens, or tranexamic 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. The study was performed to examine the robustness of results. Response to treat- ment 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 for ablation to 96 for progestogens). Two years of treatment with LNG-IUS was less costly than any other treatment except for ablation, which was more costly but less 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 treatment strategy for HMB compared with strategies beginning with oral therapies or surgery.

PROJECTING THE POTENTIAL COST-EFFECTIVENESS OF UNIVERSAL ACCESS TO MODERN CONTRACEPTIVES IN UGANDA

Balimumu PN
Department of Washington, Seattle, WA, USA

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. MATERIALS AND 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 National Demographic and Health Survey and from published and unpublished sources. Costs, life expectancy, disability-adjusted life expectancy, pregnancies, fertility and incremental cost-effectiveness were measured 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 women per year were lower for the NCP (29.70 and 6.98 vs. 32.97 and 7.28 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. $339). The incremental cost-effectiveness ratio comparing the NCP to the CCP was lower for the NCP from both perspectives ($1,074 vs. $1,041) and $448 vs. $339). The results were robust to univariate and probabilistic sensitivity analyses. 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.