compare the different methods adopted for the detection of the ADRs. **METHODS:** A prospective observational study was carried out at the three general wards of medicine department of an Indian public teaching hospital. The three different scales for causality assessment used were Naranjo's ADR probability scale, WHO-UMC causality category and, Karch and Lasagna scale. **RESULTS:** Only 60 ADRs were identified in 520 patients studied. All the identified ADRs were assessed for causality using different causality assessment scales. According to Naranjo's ADR probability scale, 52 of the reactions were 'probable', 8 of the reactions were 'possible. 28 ADRs were 'probable' and 32 were 'possible', according to WHO-UMC causality category. According to Karch and Lasagna scale, 45 ADRs were 'probable' and 15 were 'possible'. A comparison between three scales showed that there is a closer match in the 'probable' ADRs between Naranjo and Karch & Lasgna scales (87% & 75%), 45% ADRs were probable (WHO-UMC method). Out of these three methods WHO-UMC method was found to be simple to use. **CONCLUSIONS:** Causality assessment helps to assess the link between the drug and the ADRs. There is a disagreement between the outcomes of the study when three methods were used for causality assessment of reported ADRs.

INDIVIDUAL'S HEALTH – Cost Studies

PIH17
BUDGET IMPACT OF UTILIZING VARIOUS TYPES OF ADVANCED BIPOLAR ENERGY (ABE) DEVICES VERSUS CONVENTIONAL BIPOLAR ENERGY (CBE) IN TOTAL LAPAROSCOPIC HYSTERECTOMY IN CANADIAN HOSPITALS

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OBJECTIVES: Electrosurgical instruments have proven to be effective at achieving hemostasis in laparoscopic hysterectomy and in Canada, their usage is increasing. ABE devices have several advantages over conventional bipolar energy (CBE) including decreased thermal damage to tissue, improved ease-of-use and greater physician control. While all ABE devices have advantages over CBE technology, each of the 3 available ABE systems impact procedure time and length of stay differently. One disadvantage of all 3 ABE systems is the premium pricing as compared to CBE. This study was conducted to determine the budget impact of switching from CBE to 3 different ABE systems for benign laparoscopic hysterectomies in Canadian hospitals. **METHODS:** The budget impact model considers the inpatient and procedural costs incurred by a Canadian hospital performing 100 procedures annually. CBE is utilized as a baseline for efficacy and each of the 3 ABE systems are compared to CBE individually. Data on the use of health care resources was obtained from published prospective randomized/non-randomized controlled trials. Additional costing data was obtained from the Ontario Case Costing Initiative and a large Canadian hospital. The device costs were collected from market research. A multivariate sensitivity analysis using a Monte Carlo simulation was completed to ensure scientific rigour. **RESULTS:** When comparing the 3 forms of ABE to CBE, EnSeal was the only technology that significantly reduced both OR time and length of stay. This reduction in health care resources offsets Enseal's premium price resulting in an equivalent budget impact to CBE. However, the other 2 ABE systems do not show a reduction in OR time or length of stay and as a result, cost a Canadian hospital on average $30,239.93 and $93,091.44 more than CB or EnSeal per annum for laparoscopic hysterectomies. **CONCLUSIONS:** EnSeal is as cost-effective as CBE for benign laparoscopic hysterectomies in a Canadian hospital.

PIH18
COST ANALYSIS OF THE ROBOTIC SURGERY IN ITALY

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OBJECTIVES: The purpose of the study is to determine the cost of robotic surgery in comparison with traditional surgery, both in the NHS and societal perspective, in the Italian setting. **METHODS:** The prospective multicentre study performed a cost analysis on about 700 patients enrolled for the period February 2011 - December 2013 in 8 Italian Hospitals. The interventions were general, thoracic and gynaecological surgery performed with open, laparoscopic or robotic technique. The model was developed considering both direct and indirect costs in the various phases of the intervention: patients enrollment and hospitalization, first follow up one month after discharge, next follow up. The model used tariffs for direct health care costs as laboratory, instrumental tests and specialist visits. For all other health care direct costs, non health care direct costs and indirect costs the model used real costs and resources data. **RESULTS:** In NHS perspective all specialties of robotic and open interventions cost 9,471€ vs 7,232€, p<0.01. Indirect costs are lower in robotics versus open: 928€ vs 872€, p<0.05; this could be explained by lower length of stay of robotic vs open (7.78 days versus 6.41, p<0.01). In the societal perspective, costs for all specialties (robotics: 10,909€; open: 8,681€; laparoscopic: 8,303€), show differences between robotic and traditional surgery, as open and laparoscopic interventions present the same level of total costs. **CONCLUSIONS:** Robotic surgery is more expensive than traditional techniques, the operating times decrease with increasing experience of the surgeon in the use of the robot. It is important to highlight the benefits of the use of the robot in terms of ease of execution of complex interventions by both surgeon and experienced assistant. This should also have a positive impact on the quality of life of patients who should receive a level of postoperative pain in the lower robotic interventions.

PIH19
COST-EFFECTIVENESS OF ENDOMETRIAL ABLATION WITH THE NOVASURE® SYSTEM VERSUS OTHER GLOBAL ABLATION MODALITIES AND HYSTERECTOMY FOR TREATMENT OF ABNORMAL UTERINE BLEEDING (AUB): UNITED STATES COMMERCIAL AND MEDICAID PAYER PERSPECTIVES

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OBJECTIVES: Abnormal uterine bleeding (AUB) interferes with physical, emotional, and social well-being, impacting the quality of life of more than 10 million women in the US. Hysterectomy, the most common surgical treatment of AUB, has significant morbidity, low mortality, long recovery, and high associated health care costs. Global endometrial ablation (GEA) provides a surgical alternative with reduced morbidity, cost, and recovery time. The NovaSure system utilizes unique radiofrequency impedance-based GEA technology. This study evaluated cost-effectiveness of AUB treatment with NovaSure ablation versus other GEA modalities and versus hysterectomy from US commercial and Medicaid payer perspectives. **METHODS:** A health state transition (semi-Markov) model was developed using epidemiologic, clinical, and economic data from commercial and Medicaid claims database analyses, supplemented by published literature. Three hypothetical cohorts of women receiving AUB interventions were simulated over 1-, 3-, and 5-year horizons to evaluate clinical and economic outcomes for NovaSure, other GEA modalities, and hysterectomy. **RESULTS:** Model analyses show lower costs for NovaSure-treated patients than for those treated with other GEA modalities or hysterectomy over all timeframes under commercial payer and Medicaid perspectives. By Year 3, cost savings versus other GEA were $930 (commercial) and $3,000 (Medicaid); cost savings versus hysterectomy were $6,500 (commercial) and $8,900 (Medicaid). Coinciding with a 43%-71% reduction in need for re-ablation, there were 69%-88% fewer intervention/reintervention complications for NovaSure-treated patients versus other GEA modalities, and 82%-91% fewer versus hysterectomy. Furthermore, NovaSure-treated patients had fewer days of work absence and short-term disability. Cost-effectiveness metrics showed NovaSure treatment as economically dominant over other GEA modalities in all circumstances. With few exceptions, similar results were shown for NovaSure treatment versus hysterectomy. **CONCLUSIONS:** Model results demonstrate strong financial favor for NovaSure ablation versus other GEA modalities and hysterectomy from commercial and Medicaid payer perspectives. Results will interest clinicians, health care payers, and self-insured employers striving for cost-effective AUB treatments.

PIH20
LIFETIME HEALTH AND ECONOMIC CONSEQUENCES OF OBESITY-RELATED DISEASES: USING DATA FROM THE NATIONAL HEALTH INTERVIEW SURVEY, THE NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY, AND THE MEDICAL EXPENDITURE PANEL SURVEY

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OBJECTIVES: This study analyzed lifetime health and economic consequences of multiple obesity-related diseases (ORDs), including diabetes, hypertension, coronary heart disease (CHD), and stroke. **METHODS:** Nationally representative data of the U.S. civilian, non-institutionalized population was used. Our sample was from the National Health Interview Survey (NHIS), 1997-2000, and linked to the NHIS Linked Mortality Public-Use Files to estimate mortality risks. The sample was further linked to the Medical Expenditure Panel Survey (MEPS) to estimate annual health care expenditures. Disease risks were estimated with National Health and Nutrition Examination Survey (NHANES) data. Analyses were stratified by gender and adjusted for age, race, and BMI groups. Complex sampling designs in NHIS, MEPS, and NHANES were adjusted for. A Markov model populated by estimates of disease and mortality risks and health care expenditures was built to compute life years and lifetime health care expenditures for gender-race-age-BMI-specific subpopulations. **RESULTS:** Our sample comprised of 17,917 women and 13,928 men. For individuals age 40, life years lost associated with ORDs for women ranged from 2.7 (obese, not white or black, with CHD) to 14.6 (normal-weight, white, with all four ORDs) and for men from 2.3 (obese, not white or black, with diabetes) to 12.4 (normal-weight, not white or black, with all four ORDs). Lifetime health care expenditure increment associated with ORDs for women ranged from $27,749 (normal-weight, white, with hypertension) to $277,949 (overweight, not white or black, with all four ORDs) and for men from $41,804 (normal-weight, black, with hypertension) to $249,829 (overweight, not white or black, with all four ORDs). **CONCLUSIONS:** This study suggests that the lifetime health and economic consequences associated with ORDs are higher for women than men. And disease burden increases with increasing number of ORDs. Diabetes is the most costly ORD. Among sets of two ORDs, the combination of diabetes and hypertension is the most costly.

PIH21
ECONOMIC BURDEN ASSOCIATED WITH PATIENTS DIAGNOSED WITH PEYRONIE'S DISEASE IN THE UNITED STATES

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OBJECTIVES: Compare health care costs and resource utilization between patients with Peyronie's disease (PD) and matched controls without PD. **METHODS:** Male adults aged ≥ 65 in Medicare Advantage plans or aged 18-64 in commercial plans with ≥1 PD diagnosis (ICD-9-CM: 607.85) between 1/1/2007-12/31/2012 were selected from a national claims database comprised of 14M enrollees. The index date was defined as the observed first date with a PD diagnosis. Continuous eligibility for ≥6 months before (baseline period) and 1 year after (study period) the index date was required. PD patients (cases) were matched on age, gender, race, geographic region, plan type, index year, baseline health care costs and comorbidities to patients without PD, Dupuytren's contracture, or Ledderhose disease diagnoses in their claims histories (controls) by propensity score matching. Descriptive analyses compared baseline characteristics and post-index resource utilization between cohorts. As indicated by Box-Cox test and Park test, generalized linear models with gamma distribution and log link were used to compare risk-adjusted health care costs inflated to $2013 US dollars. **RESULTS:** 1,528 Medicare PD patients (mean age 70 years) and 768 commercial patients (mean age 51 years) met the inclusion criteria. PD patients had significantly higher comorbidities compared with their controls (e.g., erectile dysfunction (ED), other male genital organs diseases, urinary diseases, diabetes and hyperlipidemia) (all p<.05). During the study period, PD patients had