OBJECTIVES: The prevalence of autism in children in the United States increased from 2008 to 2009. OBJECTIVES: The objective of this study was to determine if long-acting reversible contraception (LARC) use prior to pregnancy and health plan type were associated with a higher likelihood of having an intended pregnancy. METHODS: Women members of the Kaiser Permanente, Northern California (KPNC) integrated health plan aged 15–44 years who became pregnant between 1/1/2010 and 12/31/2012 were identified from KPNC databases. The last contraceptive method used within 2 years preceding pregnancy was determined. Key characteristics were compared among women with LARC vs. those with unintended pregnancies (LARC-unwanted or missed). Logistic regression analyses were conducted to determine if health plan type, age group, or LARC use were predictive of IP, controlling for age, race/ethnicity, marital status, education/income, parity, and select comorbidities. RESULTS: Among women included in the study, 27,498 (61%) had IPs and 17,853 (39%) had LARC in their contraceptive use before pregnancy. Neither LARC use nor health plan type were associated with a higher likelihood of having an IP. Conditional logistic regression analyses were conducted to examine if health plan type and LARC use were associated with a higher likelihood of having an IP when controlling for age, race/ethnicity, marital status, education/income, parity, and select comorbidities. CONCLUSIONS: Women KPNC members who used LARC methods prior to pregnancy and those who had a HSA were more likely to have an IP than an UP.

PIH11 AUTISM PREVALENCE IN CHILDREN IN THE UNITED STATES MEDICAID POPULATION

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OBJECTIVES: The current study examined patient age, gender, race, geographic variation as well as the prevalence of autism in children using Medicaid data. METHODS: A retrospective study was performed among the Medicaid fee-for-service population from January 1, 2008 to December 31, 2009. Children aged under 17 years and diagnosed with autism were identified using International Classification of Disease, 9th Revision, Clinical Modification (ICD-9-CM) code 299.0X. A 2-year period of continuous Medicaid FFS enrollment during the study period was required. Disease prevalence was stratified by region, state, age, races. Children residing in the Midwestern region of the United States were shown to be at a higher risk for an autism diagnosis.

CONCLUSIONS: The prevalence of autism in children of various ethnicities was highest for Asian patients compared to other races. Children residing in the Midwestern region of the United States were shown to be at a higher risk for an autism diagnosis.

PIH12 PREVALENCE OF TASTE DYSFUNCTION IN THE ADULT UNITED STATES POPULATION: A NATIONWIDE SURVEY OF THE NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY

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OBJECTIVES: There are no current nationally representative estimates on taste dysfunction for the US population; the last estimates based on the 1994 National Health Interview Study indicated population prevalence reports of taste problems of 0.6%. The primary objective of this study is to provide prevalence estimates in an adult population of taste dysfunction and health perception in the US population. METHODS: Data from the 2011–2012 National Health and Nutrition Examination Survey (NHANES) was used to access the prevalence of self-reported taste dysfunction as assessed by the Taste and Smell Questionnaire; completed by participants ages 40 – 80. After exclusion of persons with negative sample were fed and missing data, the final sample was 3437. Chi-square and ANOVA were used to make statistical comparisons and all analyses were weighted to account for the sampling design. RESULTS: The prevalence of taste dysfunction was 3.5% (95% CI 4.6, 6.1). Taste dysfunction was higher in older adults compared to younger adults (6.9% vs. 4.2%, respectively, p < 0.01), and in those reporting problems with smell compared to those with no problem (21.2% and 3.4%, respectively, p < 0.001). Persons with taste dysfunction reported significantly more days of poor physical health (mean = 6.4, SE = 1) and mental health (mean = 6.2, SE = 1) than those without problems with taste mean = 3.9, SE = 24, p = 0.04, mean = 3.7, SE = 0.24, p = 0.03, respectively). CONCLUSIONS: Based on self-reported data, taste dysfunction affects 5% of the weighted sample. Discrepancies between reported prevalence from 1994 was likely due to differences in the operationalization of taste dysfunction. The association of problems with taste and the increase in reported days of poor physical and mental health should be investigated further.

PIH13 PROMOTING MEDICATION SAFETY IN THE WARDS OF A PUBLIC TEACHING HOSPITAL

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OBJECTIVES: Health care risk epidemiology identifies medication error as the commonest cause of adverse effects on patients. Errors can occur at any phase of the medication process, so incidence rates should be estimated along with their clinical outcomes at each stage. The aim of this study was to assess and analyze the medication errors for determining their nature, types, incidence and clinical significance in an Indian setting. METHODS: This prospective observational study was conducted in 3 medical wards of a public teaching hospital. All the information was collected in a standard data collection form. Medication errors were identified and analyzed from patients’ records using Current Index of Medical Sciences (CIMS) and Micromedex Drug-Drug database. RESULTS: Of the 450 studied, 87 patients were found to have 113 medication errors. The 3 most common errors were drug interactions followed by inappropriate frequency and overdose (35%, 23% and 8%, respectively). Other errors were underdose, incomplete prescription and duplication of therapy. Nitrofurantoin, domperidone & cefixime were common drugs administered at inappropriate frequency. Drugs involved in overdose were enoxaparin, gentamicin, azithromycin & domperidone. The incidence of medication error was 26%. Antimicrobial agents (54%) had contributed maximum to the error followed by GI agents (20%), anticoagulants (11%) and CNS agents (8%). All the errors were category B error (NCC MERF medication error index) CONCLUSIONS: The availability of such evidence would help in improving patient safety in Indian setting and to promote medication safety.

PIH16 CAUSALITY ASSESSMENT OF ADVERSE DRUG REACTIONS IN WARDS OF AN INDIAN PUBLIC TEACHING HOSPITAL

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OBJECTIVES: Causality assessment is used to evaluate the likelihood of a particular treatment is the cause of an observed adverse event. The aim of this study was to...
the 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 the index period. All the identified ADRs fell in the same assessment category, 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 these three scales showed that there is a closer match in the ‘probable’ ADRs between Naranjo and Karch & Lasagna 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 three methods, however, two methods were used for causality assessment of reported ADRs.

**INDIVIDUAL’S HEALTH – Cost Studies**

**PH17**

**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. Advanced bipolar electrosurgical devices use conventional bipolar energy (CBE) and offer the advantages of 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 devices impact procedure time and length of hospital stay differently. One disadvantage of all 3 ABE systems is the premium pricing 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. **RESULTS:** 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 and as a result, a cost Canadian hospital on average $30,239.93 and $93,091.44 more than CBE or EnSeal per annum for larger endometriosis cases. **CONCLUSIONS:** ABE devices are cost-effective as CBE for benign laparoscopic hysterectomies in a Canadian hospital.

**PH18**

**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 8,747€ vs. 7,232€, p<0.01. Indirect costs are lower in robotics versus open: 908€ vs. 1,590€, 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. **CONCLUSIONS:** Robotic interventions present the same level of total costs.

**PH20**

**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, 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 Medical Expenditures Panel Survey (MEPS). **RESULTS:** The impact of ORDs was further linked to the Medical Expenditure Panel Survey (MEPS) to estimate national 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. **CONCLUSIONS:** Analyzing data from 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 lifetime economic consequences for women and men. **RESULTS:** The total economic consequences of 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.

**PH21**

**ECONOMIC BURDEN ASSOCIATED WITH PATIENTS DIAGNOSED WITH PEYRIONE’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 FD. **METHODS:** Male adults aged ≥ 65 in Medicare Advantage plans or aged 18-64 in commercial plans with ≥ 1 FD diagnosis (ICD-9-CM code 603.80 or ICD-10 code Q63.0) from 2/1/2007 to 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. **RESULTS:** For men with PD (n=1,528 Medicare beneficiaries aged ≥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 non genital organ diseases, urinary diseases, diabetes and hyperlipidemia) (all p<0.05). During the study period, PD patients had...