

two different sources: the unitary cost published by the Mexican Social Security Institute (IMSS) and the recovery cost of the General Hospital of Mexico (both with 2013 costs). **RESULTS:** The cost of treating hypoglycemic events varies according to severity. The main difference between the severities of hypoglycemia was in the hospitalization days; in mild hypoglycemia there was no hospitalization, but in a severe hypoglycemia it was considered 1.46 (SD±0.77) days in urgency and 3.77 (SD±1.01) days in hospitalization. In the case of the IMSS, the cost of treating a hypoglycemic event was US\$997.81, US\$1,901.78 and US\$2,709.4 for mild, moderate and severe hypoglycemia, while for the General Hospital case the costs were US\$457.69, US\$677.88 and US\$902.22, respectively. **CONCLUSIONS:** The high cost of providing medical care to patients with hypoglycemia and its complications represents an economic burden to the Mexican public health care system. Currently, effective therapies exist for the treatment of DM2 which have a lower risk of causing hypoglycemic events, and consequently greater control of glucose levels. From a public health perspective, the use of agents with greater safety and effectiveness in the treatment of DM2 could avoid the high costs of treating hypoglycemic events.

PHS28

ESTIMATING MORBIDITY COSTS ATTRIBUTABLE TO BREAST CANCER AMONG YOUNGER WOMEN AGED 18 TO 44 YEARS—UNITED STATES, 2000–2010

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OBJECTIVES: Although breast cancer occurs primarily among women over age 50 years, each year more than 10,000 cases are diagnosed among women aged 18–44 years. To date, no study has specifically quantified the economic burden of breast cancer in this age group in the United States. This study is the first to estimate work and home productivity losses due to breast cancer among younger women aged 18–44 years. **METHODS:** We used a two-part regression model and data from the 2000–2010 National Health Interview Survey to estimate the number of work and home productivity days missed due to breast cancer, adjusted for socioeconomic characteristics and comorbidities. We compared our estimates for younger women with those of older women aged 45–64 years. **RESULTS:** Per capita, younger women with breast cancer had annual losses of \$2,293 (95% confidence interval [CI]: \$1,069–\$3,518) from missed work and \$288 (95% CI: \$105–\$471) from missed home productivity. Younger women too sick to work had annual breast cancer-attributable work loss costs of \$365 per person (95% CI: \$208–\$522). In total, breast cancer-attributable morbidity costs for younger women were \$274 million (95% CI: \$128–\$420 million) for work loss among the employed, \$46 million (95% CI: \$17–\$75 million) for home productivity, and \$10 million (95% CI: \$6–\$15 million) for work loss among women too sick to work. Older women with breast cancer had lower per capita work loss costs but higher total morbidity costs. **CONCLUSIONS:** Younger women with breast cancer face significant work and home productivity losses. These results underscore the importance of continued efforts by the public health community to support the unique needs of younger breast cancer survivors and promote prevention efforts throughout the lifespan.

PHS29

ASSESSING THE ECONOMIC BURDEN OF ATTENTION DEFICIT/HYPERACTIVITY DISORDER AMONG CHILDREN IN THE UNITED STATES USING THE 2011 MEDICAL EXPENDITURE PANEL SURVEY (MEPS)

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OBJECTIVES: To determine and compare: 1) the incremental total costs (direct and indirect) for children (age 3–17 years) with and without ADHD; and 2) differences in the incremental direct costs for children with and without ADHD with respect to age groups (infants, 0–5; children, 6–11; and adolescents, 12–17 years); while controlling for covariates. **METHODS:** The 2011 Medical Expenditure Panel Survey (MEPS) was the data source for the study. The sample consists of all children (age 0–17 years) with a diagnosis of ADHD (ICD9-code=314) (Group-I) and without a diagnosis of ADHD (Group-II). The incremental total cost of ADHD comprised of direct expenditures (prescribed medications, inpatient, ambulatory, and emergency department care), and the indirect costs (parents' loss of productivity due to absence from school by children). A two-part model with logistic regression and a generalized linear model was used to estimate the incremental costs of ADHD while controlling for age, gender, race, Charlson co-morbidity index, family income, health insurance, usual source of care, area, and region. SAS 9.3 and STATA 12.0 were used for statistical analyses. **RESULTS:** 2011 MEPS included 9838 children (age 0–17 years), of whom 494 (5.02%) children had a diagnosis of ADHD. Group-I was 2.74 times more likely (CI= 1.62 to 4.62, $p < 0.001$) than Group-II to have an expenditure of at least \$1, and, among children with positive expenditures, Group-I had 33% higher expenditures than Group-II ($p = 0.001$) after controlling for covariates. The incremental direct cost of ADHD was higher among adolescents than infants or children [\$683 ($p = 0.011$) vs. \$494 ($p = 0.018$) vs. \$458 ($p = 0.013$)], after controlling for covariates. **CONCLUSIONS:** Children with ADHD have significantly higher costs than children without ADHD. Further research is needed to substantiate the high expenditures associated with ADHD.

PHS30

ECONOMIC BURDEN OF STROKE: ANALYSIS FROM AN ADMINISTRATIVE DATABASE

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OBJECTIVES: Stroke is a sudden loss of brain function due to inadequate blood flow with high impact on health status and severe prognosis. The objective of this analysis was to assess incidence, mortality and economic burden of stroke from a large population based-study. **METHODS:** Lombardy Region includes around 9.9 million

individuals. The study population was identified through a data warehouse (DENALI), which matches with a probabilistic linkage demographic, clinical and economic data of different Healthcare Administrative databases. Using DENALI we detected all subjects who were hospitalized for stroke (ICD-9 CM: 430.xx-438.xx) during the period 2000–2010. The first hospital admission date was used as index date. We estimated incidence, mortality and health care costs (hospitalizations, drugs and outpatient examinations/visits) per patient-year from the National Health Service's perspective. **RESULTS:** During the study period, around 530,000 subjects (48.3% male) experienced at least one hospital admission for stroke, corresponding to 5.2 cases on 1,000 Lombardy inhabitants per year. Subjects had a mean (±SD) age of 74.0 (±13.2) years. Ischemic stroke represented the most frequent diagnosis (36.8%) followed by transient ischemic attack (TIA, 11.2%) and hemorrhagic stroke (9.0%). The overall mortality rate (x100 person-years) was 11.7, with a significant worst survival for hemorrhagic (16.7) and ischemic (9.1) diagnosis with respect to TIA (7.8). The average cost during the index year was around 6,000€/patient-year, 10,000€/patient-year and 20,000€/patient-year for TIA, ischemic and hemorrhagic stroke, respectively. For these diagnoses the main cost driver was represented by hospitalizations, accounting for 78%, 87% and 94%. **CONCLUSIONS:** Stroke is a burdensome condition with a high mortality disabilities and costs, indicating the primary importance in monitoring the developing of the disease from the NHS's perspective. Administrative database analysis shows to be an efficient tool to accurately estimate the burden of stroke diagnoses.

PHS31

CHANGES IN PREVALENCE OF DIABETIC COMPLICATIONS AND ASSOCIATED HEALTH CARE COSTS: “REAL-WORLD” DATA FROM A NATIONALLY-REPRESENTATIVE DIABETIC COHORT IN TAIWAN

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OBJECTIVES: Long-term health and economic consequences of diabetes mellitus are of significant importance to health policy makers to identify the most efficient interventions for disease managements. However, existing data are mainly from simulation models instead of “real-world” data. The objective of this study was to longitudinally evaluate the changes of prevalence of diabetic complications and associated health care cost in a nationally-representative longitudinal diabetic cohort. **METHODS:** We used the 2000–2011 Taiwan's Longitudinal Health Insurance Database (LHID) to conduct a population-based, cohort study of 136,372 type 2 diabetic patients. Diabetic complications of each patient were calculated annually after the cohort entry by the adapted Diabetes Complications Severity Index (aDCSI) score (sum of diabetic complication with severity levels, range 0–13) using diagnostic codes recorded in the LHID. Study subjects were further categorized into six subgroups according to their aDCSI score (0, 1, 2, 3, 4, 5+) at cohort entry. Health care utilizations (including outpatient and inpatient visits) as well as direct medical costs for the six subgroups were estimated annually using patient-level data from the LHID. **RESULTS:** We found the severity of diabetic complications increased over time, especially for patients with aDCSI score of 2 and above at cohort entry (at 10-years of follow-up: aDCSI=0 (cohort entry), 2.37; aDCSI=1; 3.59; aDCSI=2; 4.60; aDCSI=3; 5.14; aDCSI=4; 5.96). There were significant differences in health care utilizations and associated medical costs among patients stratified by aDCSI scores (e.g. at 1 year after cohort entry, mean counts of inpatient visits: 0.14 vs. 1.81 for aDCSI=0 vs. 5+). Relatively high health care utilizations and associated medical costs in the first year of cohort entry were observed for patients with aDCSI score of 4 and above at cohort entry. **CONCLUSIONS:** We provide significant evidence for longitudinal changes in diabetic complications and associated health care utilization and medical costs among diabetic patients.

PHS32

THE BURDEN OF ACUTE CORONARY SYNDROME FOR THE BRAZILIAN SUPPLEMENTARY HEALTH SYSTEM

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OBJECTIVES: To estimate the Brazilian supplementary health system costs of acute coronary syndrome (ACS), considering direct costs under the private payer perspective. **METHODS:** Retrospective transactional-level data collection about hospitalization costs based on claims data from a private payer perspective. Data were collected based on patients' admission International Code of Disease version 10 (ICD-10) of Myocardial Infarction (MI) or unstable angina (UA). Index hospitalization direct costs were retrieved from private databases and a one year follow up was performed to evaluate rate of readmission and its associated costs. Patients were divided in 4 main groups based on treatment adopted at index hospitalization: clinical treatment (CT), angioplasty with stent placement (AngSt), Coronary Artery Bypass Graft (CABG) and Angioplasty without stent placement (Ang). **RESULTS:** 2,803 hospitalizations were analyzed. Average age was 61 years old and 77% were men. We found that 85.44% underwent AngSt, 7.46% CABG, 5.6% Ang and 1.5% CT. Death rates were 1.63%, 6.22%, 5.73%, 4.76% for AngSt, CABG, Ang and CT respectively. The average hospitalization costs for each group was: US\$ 17,656 for AngSt, US\$ 20,762 for CABG, US\$ 15,638 for Ang and US\$ 9,331 for CT. Readmission after index hospitalization were: 7.56%, 1.91%, 5.1% and 21.43% for AngSt, CABG, Ang and CT respectively. And the associated cost were US\$ 13,986, US\$ 12,643, US\$13,000 and US\$ 12,945 respectively. **CONCLUSIONS:** AngSt is the most common treatment adopted for managing ACS with an average cost of US\$ 17,656, followed by CABG with an average cost of US\$ 20,762. ACS has an important economic burden for private payers that can be prevented. Mostly important, rehospitalization after an ACS episode must be avoided due its high economic impact.

PHS33

THE COST OF HOSPITALIZATION DUE TO ACUTE RESPIRATORY INFECTIONS IN NORTHERN INDIA

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