

CR, SK) and insurance records (HU). Direct costs from the payer's perspective were based on published national sources (CR, SK), DRG lists (PL) and the insurance records (HU). **RESULTS:** The incidence of hospitalized bacteraemia/sepsis and meningitis per 100,000 person years were: 2.07 and 1.34 (CR), 1.2 and 0.49 (SK), 0.66 and 0.32 (PL), and 3.16 and 1.01 (HU). The case fatality rate was: 31% and 25%, 12% and 25%, 40% and 63%, and 11% and 29%. An exponential increase in both measures was apparent with advancing age. The total economic burden of IPD in adults over 50 was: EUR 666,050; 159,528; 180,015 and 140,249. Adults  $\geq 65$ , who represent 41% of the combined population, account for 54% of the costs. **CONCLUSIONS:** The IPD burden in adults increases with age, and is associated with a high risk of death. Higher incidence in HU obtained from insurance records seems to more reliably reflect the reality and highlights systematic underreporting of national surveillance systems.

## PHS23

## DIRECT MEDICAL COSTS ASSOCIATED WITH STROKE IN NON-VALVULAR ATRIAL FIBRILLATION IN INDIA

Marfatia S<sup>1</sup>, Sangole N<sup>2</sup>, Munshi S<sup>1</sup>, Tiwari A<sup>1</sup>, Patel M<sup>1</sup>, Suvarna V<sup>3</sup>, Bhure S<sup>3</sup>, Monz BU<sup>4</sup>  
<sup>1</sup>pharmEDGE, Syosset, NY, USA, <sup>2</sup>Boehringer Ingelheim, Mumbai, India, <sup>3</sup>Boehringer Ingelheim, Mumbai, Mumbai, India, <sup>4</sup>Boehringer Ingelheim GmbH, Ingelheim, Germany  
**OBJECTIVES:** To estimate the stroke related disease burden in terms of health care resource utilization and average per-patient costs among patients with a prior diagnosis of non-valvular atrial fibrillation (NVAF) in India. **METHODS:** Data were collected retrospectively in three large multidisciplinary community hospitals in three cities in India. Medical charts of 400 patients diagnosed with stroke and NVAF from June 1, 2011 to September 1, 2011 were reviewed. Data abstracted were demographic characteristics, clinical diagnosis, risk factors, comorbid conditions, date of diagnosis/admission, date of discharge, and types of inpatient procedures. Data regarding outpatient services such as physician visits, laboratory tests, INR monitoring, diagnostic tests, nursing services, and speech/physiotherapy over a three month period post-discharge were obtained via patient follow-up surveys. Costs associated with inpatient services were obtained from hospital discharge bills and the pricing menu of the three hospitals. **RESULTS:** The mean age of patients in the study was 59 (SD 10) and the majority of patients (62%) were male. Of the 400 patients, 61% had ischemic stroke and about 60% of the patients were moderate to moderate-severe disabled based on the modified Rankin Scale. The mean length of stay for patients with ischemic stroke was 16 days (SD 4). The direct medical costs for patients with moderate or more severe ischemic stroke (inpatient and outpatient) over the 3 month follow-up period was Indian rupees, Rs 130,976 (SD 3,913) with inpatient hospital costs accounting for a major portion (Rs 114,202) of the overall costs (per patient). **CONCLUSIONS:** The findings of the study indicated that the acute treatment for 3 months post ischemic stroke among NVAF patients imposes considerable economic burden (US \$7,138) among patients in India. As inpatient costs are major cost drivers, clinical efforts should focus on timely management of NVAF induced strokes and use of preventive treatments.

## PHS24

## COST OF TRAFFIC ACCIDENTS RELATED TO LOW VISIBILITY CONDITIONS: A COST OF ILLNESS STUDY

Fekete J<sup>1</sup>, Várady G<sup>2</sup>, Vattay P<sup>1</sup>, Boncz I<sup>2</sup>  
<sup>1</sup>University of Pécs, Zalaegerszeg, Hungary, <sup>2</sup>University of Pécs, Pécs, Hungary  
**OBJECTIVES:** To calculate the health care cost of traffic accidents occurring in night or daylight under low visibility. **METHODS:** Data on traffic accidents derive from the database of Hungarian Central Statistical Office (HCSO). We assessed the cost of both health services in kind and health services in cash. The direct cost related to traffic accidents were derived from the financial database of the National Health Insurance Fund Administration, the only health care financing agency in Hungary (Hungarian DRG point system version 5.0). Cost of benefits in cash was calculated with an average sick pay. The average recovery period of patients with traffic accidents was assumed 4 months. **RESULTS:** A total of 20635 persons were injured and 1106 persons were died on the road by traffic accident. 45 percent of casualty has been taken in night or daylight under low visibility. Average cost of restricted visibility accidents is 510886 HUF per capita (approx. 2041 EURO). We calculated an average sick pay 119365 HUF (approx. 477 Euro) per capita per month. The expenditures of the National Health Insurance Fund Administration could easily reach the 17 billion HUF (approx. 67.9 million Euro) per years. **CONCLUSIONS:** Traffic accidents and subsequent medical conditions are important burden for the Hungarian health insurance system with an annual expenditure of 17 billion HUF (97.9 million EURO). Better illumination, law regulation, appropriate education and traffic instructions might decrease the costs related to accidents on the road.

## PHS25

## DIRECT MEDICAL COSTS OF MEDICAL CARE OF GASTROINTESTINAL BLEEDING IN MEXICO

Contreras I<sup>1</sup>, Moreno-madriral LC<sup>2</sup>, Cruz-soriano I<sup>3</sup>  
<sup>1</sup>Instituto Mexicano del Seguro Social, México City, Mexico, <sup>2</sup>Hospital General de Zona No. 1-A Instituto Mexicano del Seguro Social, México, Mexico, <sup>3</sup>Hospital General de Zona No. 1-A Instituto Mexicano del Seguro Social, México, Mexico, Mexico  
**OBJECTIVES:** Gastrointestinal bleeding is one of the most common causes of medical attention in-hospital demand, with high impact on morbidity, mortality and costs of care. The aim of this study was to evaluate from the public payer perspective in Mexico, the cost of care of patients with gastrointestinal bleeding. **METHODS:** Through review of medical records of patients with gastrointestinal bleeding from January to March 2012 in a hospital in the Mexican Social Security Institute (IMSS) we evaluated the length of hospital stay, laboratory tests, endoscopy and pharmacological treatment prescribed. We used as reference the 2011

database of the institution and expressed the cost in U.S. dollars (USD) at an exchange rate of 13.72 Mexican pesos/USD [June 2012] and calculated the average cost per patient, we identified the component of major cost and identify the factor associated with higher cost. **RESULTS:** We included 70 patients with mean age 68  $\pm$  14 years, 61% were women. 80% of cases had a comorbidity, the most frequent was systemic arterial hypertension (90%). On average hospital stay was 8  $\pm$  4 days. The average cost per patient was 3.776 USD (1.490 USD- 8.180). The major cost component was hospital stay accounting for 81% of total costs. In patients Age over 85 years, the presence of comorbidities or gender were not associated with higher cost ( $p > 0.05$ ). **CONCLUSIONS:** Gastrointestinal bleeding is a major cause of resource utilization for the IMSS, the main component are the days of hospital stay which cause a high economic impact on accessibility to other hospital claims.

## PHS26

## ECONOMIC BURDEN OF SEASONAL INFLUENZA B IN FRANCE DURING WINTER 2010-2011

Silva ML<sup>1</sup>, Perrier L<sup>2</sup>, Spath HM<sup>3</sup>, Mosnier A<sup>4</sup>, Cohen JM<sup>4</sup>  
<sup>1</sup>Research Group in Health Economics (GATE, UMR 5824, CNRS); University Lyon 1; University Lyon 2, Lyon, France, <sup>2</sup>Cancer Centre Léon Bérard, Lyon, France, <sup>3</sup>ISPB - Faculté de Pharmacie - Université Lyon 1, Lyon, France, <sup>4</sup>Regional Group for the Surveillance of Influenza - GROG, Open Rome, Paris, Paris, France  
**OBJECTIVES:** In France, 4-10% of the population is annually affected by influenza. This represents direct and indirect costs, which vary according to the dominant influenza virus strain circulating. Policy makers are interested in its burden, for better allocating resources for prevention and control measures. As international literature regarding seasonal influenza B is rare and not entirely applicable in France, our study aims to assess its costs in 2010/2011 under the French Health Insurance perspective. **METHODS:** Cases: patients of all ages, consulting for an acute respiratory infection a physician, member of an influenza surveillance network in France (GROG network), completing the routine clinical form and whose nasopharyngeal swab was lab confirmed positive for influenza B. Physicians completed follow-up questionnaires 7 and 28 days after swabbing. Costs (consults, drugs, exams, hospitalization and daily allowances) were assessed for each patient. Treatments costs were modelled using linear, tobit and probit regressions (variables: costs, risk factor, vaccination, age group). Total costs estimation for the French Health Insurance were calculated by multiplying total costs per patient, flu attack rate and population. **RESULTS:** N=201 patients were included. Influenza B mean cost was 90.63€ (SD 132.76) per patient. Risk factors or influenza vaccine status did not impact the mean cost. In children and older people these costs were very similar (0-4 yo=76.74€, 5-14 yo=75.45€,  $\geq 65$  yo=72.50€). Main cost items were follow-up consults and antibiotics. For adults, costs almost doubled, reaching approximately 141.25€ per patient, due to work absenteeism. Total influenza B costs for the National Health Insurance were estimated on almost 400 million Euros in France during 2010/11. **CONCLUSIONS:** The results show that in a season where influenza B is dominant, it causes an important economic impact. Further investigations of strategies (vaccines) for reducing influenza B cases, providing evidence for policy-makers' decisions are in progress.

## PHS27

## EVALUATION OF THE CLINICAL AND ECONOMIC BURDEN OF THE HUMAN IMMUNODEFICIENCY VIRUS IN UNITED STATES VETERAN PATIENTS

Wang L<sup>1</sup>, Baser O<sup>2</sup>, Huang A<sup>1</sup>, Li L<sup>1</sup>, Fritschel EK<sup>1</sup>, Xie L<sup>3</sup>  
<sup>1</sup>STATinMED Research, Dallas, TX, USA, <sup>2</sup>STATinMED Research/The University of Michigan, Ann Arbor, MI, USA, <sup>3</sup>STATinMED Research, Ann Arbor, MI, USA  
**OBJECTIVES:** To assess the clinical and demographic characteristics, utilization, and cost patterns of human immunodeficiency virus (HIV) patients in the U.S. veteran population. **METHODS:** A retrospective analysis was performed using the Veterans Health Administration (VHA) Medical SAS Datasets from October 1, 2007 to September 30, 2011. All U.S. veteran beneficiaries diagnosed with HIV were identified using International Classification of Disease 9th Revision Clinical Modification (ICD-9-CM) diagnosis codes 042.xx and V08.xx. Descriptive statistics were calculated as means  $\pm$  standard deviation (SD) and percentages to measure demographic, cost, and utilization distribution in the sample. **RESULTS:** A total of 2,432 patients were diagnosed with HIV, who were most frequently designated as Caucasian (n=1,201, 49.38%) and often lived in the southern parts of the United States (n=905, 37.21%). Common comorbidities included hypertension (n=1,531, 55.55%) and diabetes (n=558, 22.94%). Survival rates were high for all age groups (age  $\leq 39$ : 98.21%; 40-64 years: 93.48%;  $\geq 65$ : 87.11%). Outpatient services were utilized by 99.92% of HIV patients, followed by inpatient (20.44%) and outpatient emergency room (ER) visits (7.11%). An average number of 0.39 inpatient visits and 21.01 outpatient visits per patient occurred during the 1-year follow-up period. Outpatient office (\$10,558, SD=\$12,856), outpatient ER (\$36, SD=\$240), and inpatient (\$8,371, SD=\$35,444) values contributed to follow-up health care expenditures. **CONCLUSIONS:** U.S. veterans with HIV experienced a high average number of outpatient visits during the follow-up period as well as frequent comorbidities and high survival rates. These may have translated to the high outpatient expenses evident in the study.

## PHS28

## THE COST OF MANAGEMENT OF PATIENTS WITH ATRIAL FIBRILLATION : AN OBSERVATIONAL STUDY IN UK NHS PRIMARY CARE

Kassianos G<sup>1</sup>, Fuat A<sup>2</sup>, Arden CD<sup>3</sup>, Hogan S<sup>4</sup>, Baldock L<sup>5</sup>  
<sup>1</sup>The Birch Hill Medical Centre, Bracknell, Berkshire, UK, <sup>2</sup>Carmel Medical Practice (Darlinton) and University of Durham, Durham, UK, <sup>3</sup>Park Surgery, Eastleigh, Hampshire, UK, <sup>4</sup>Sanofi, Guildford, Surrey, UK, <sup>5</sup>pH Associates Ltd, Marlow, Buckinghamshire, UK  
**OBJECTIVES:** The management of atrial fibrillation (AF) represents a significant and increasing burden on the UK National Health Service (NHS). Understanding this