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OBJECTIVES: Information on costs is critical to public health policy decision-making about prevention strategies, but is sparse in low-income countries. We conducted a prospective multi-site survey of persons hospitalized in public and private facilities with acute respiratory infection (ARI) in northern India to estimate the costs of ARI episodes. **METHODS:** Convenience samples of patients hospitalized with ARI were recruited at 9 public and 15 private health care facilities in the National Capital Region and Srinagar. Face-to-face surveys were conducted with participants upon admission to collect data on out-of-pocket costs of hospitalization, consultation, medications, diagnostics, transportation and lodging. Follow-up telephone surveys were conducted 2 weeks post-discharge to collect additional information including missed work and costs incurred after hospitalization. Out-of-pocket costs in public facilities were supplemented with WHO-CHOICE estimates. Missed worked days were valued on per capita national income (68,748 Indian Rupees). **RESULTS:** During September, 2012-March, 2013, 452 hospitalized ARI patients were enrolled (325 in public and 126 in private health facilities). Median total costs of hospitalized ARI in public facilities was 7,633 (IQR 4, 875-13,793) Indian Rupees (INR) [US$122 (IQR $78-221)] and in private facilities INR 13, 598 (IQR 8,993-22,924) [US$218 (IQR $144-367)]. The median length of stay was 7 days (IQR 5-11 days) in public facilities and 4 days (IQR 3-5) in private facilities. The indirect cost (defined as cost of missed work days) accounted for 16% of total cost in private facilities and 25% in public facilities. Median total cost of ARI for inpatients was 11% of annual per capita income in public institutions and 20% in private institutions. **CONCLUSIONS:** ARI episodes resulting in hospitalizations are expensive and could be higher if more than one episode occurs per year. The cost and benefit of proven strategies to reduce the burden, such as influenza and pneumococcal vaccination should be evaluated.

PHS34

ECONOMIC BURDEN OF URTICARIA REQUIRING HOSPITALIZATION: ANALYSIS FROM AN ADMINISTRATIVE DATABASE

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OBJECTIVES: Urticaria is a dermatological condition characterized by a vascular reaction of the upper dermis. The objective of this analysis was to assess the economic burden of urticaria from a large population based-study. **METHODS:** The study population was identified through the DENALI data warehouse of the Italian Lombardy Region: with a probabilistic linkage DENALI matches demographic, clinical and economic data of different Health care Administrative databases. We detected all subjects who were hospitalized for idiopathic urticaria (ICD-9 CM: 708.1) or other specified urticaria (ICD-9 CM: 708.8) during the period 2000–2011. The first hospital admission date was used as index date. We estimated health care costs (hospitalizations, drugs and outpatient examinations/visits) per patients-year from the National Health Service's perspective. **RESULTS:** During the study period, 7,864 subjects (63.2% female) experienced at least one hospital admission for idiopathic urticaria or other specified urticaria. Subjects had a median(min-max) age of 40.9(0.0-97.1); 35.4(0.1-97.1) and 42.4(0.0-97.1) years for idiopathic and other specified urticaria, respectively. The overall cost during the index year was around 2,100€/patient-years, with no significant differences between types of urticaria. From the 6th to the 1st year before the index event there was a slightly increase in costs: from 950€/patient-years to 1,400€/patient-years. The overall cost remained stable for the next 5 years after the event (1,200€/patient-years). Hospitalization represented the main driver of the overall cost: 61% before, 73% during, and 53% after the index event. The most prescribed therapies were antihistamines for systemic use, antibacterials and corticosteroids for systemic use, with a peak in the month of the index event; the prescriptions of corticosteroids as dermatological preparation were more frequent in the month preceding the hospitalization. **CONCLUSIONS:** The economic burden of urticaria was mainly attributable to the index hospitalization, which led to higher costs after the index event. Detailed analysis are allowed by administrative data.

PHS35

EPIDEMIOLOGIC AND ECONOMIC BURDEN ATTRIBUTABLE TO ATRIAL FIBRILLATION FROM ADMINISTRATIVE DATA

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OBJECTIVES: Atrial Fibrillation (AF) is the most common type of heart rhythm disorder, with a prevalence of 0.5% in the adult population. It causes a significant increase of cardiovascular complications and reduction of long-term survival. The objective of this analysis was to assess the epidemiologic and economic burden of AF from a large population based-study. **METHODS:** The study population was identified through the DENALI data warehouse of the Italian Lombardy Region: with a probabilistic linkage DENALI matches demographic, clinical and economic data of different Health care Administrative databases. The study population was made by all subjects who, during the period January 2000–December 2010, were hospitalized for AF and flutter (ICD-9-CM: 427.3) or received ablation of heart tissue (ICD-9-CM: 37.33 and 37.34) and/or conversion of cardiac rhythm (ICD-9-CM: 99.61,99.62, 99.69). 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 510,000 subjects (50.2% male) were detected, corresponding to 5 AF cases on 1,000 Lombardy inhabitants per year. Subjects had median(min-max) age of 74(0-110) years. According to the CHADS score, 62.8% and 15.6% of the study population had a moderate and high risk of stroke, respectively. The overall mortality rate (x100 person-years) was 9.9, increasing significantly with the increasing of CHADS score: 4.6, 8.9 and 18,5 for low, moderate and high stroke risk, respectively. The average cost during the index year was around 9,600€/patient-years: the main driver was represented by hospitalizations (83%), followed by drugs (9%). **CONCLUSIONS:** Administrative database analysis is an efficient tool to track epidemiologic and medical picture in patients with AF, which poses a significant burden in term of incidence, mortality and costs.

PHS36

COSTS OF PNEUMOCOCCAL DISEASES FOR CHILDREN UNDER 5 YEARS IN COLOMBIA

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OBJECTIVES: The most common infections due *Streptococcus pneumoniae* are: otitis, Pneumonia, meningitis and sepsis. The aim of this study was to estimate the direct and indirect costs of pneumococcal diseases, in population under 5 years old in Colombia. **METHODS:** Direct costs were determined from 2 sources: costs information for 2012 from a Health Medical Organization (HMO) with national coverage and the construction of cases-type based on clinical practice guidelines, through *bottom-up* methodology: the generating cost events were identified, validated with medical experts and valued according to tariff manual SOAT 2013. Indirect costs were related to mortality and sequelae caused by pneumococcal diseases. Mortality was estimated in terms of years of potential life lost (YPLL) based on the YPLLipc model (Gardner and Sanborn). Sequelae were measured in life years saved: disability-adjusted life years and the years of life lost to premature death. The cost estimation was done from the perspective of third-party payer. Costs were expressed in 2013 Colombian pesos (~1927 Colombian Peso per 1 USD). **RESULTS:** Taking into account the HMO information, the average cost of medical attention for Acute Otitis Media was $150,274 per outpatient case and $1,514,030 per inpatient case, for pneumonia $201,969 per outpatient case and $2,238,235 per inpatient case, for meningitis and sepsis $371,006 per outpatient case and $7,446,978 per inpatient case, for hearing loss $821,857 and for mastoiditis $206,473. Taking into account the cases-type information, the average cost of medical attention for Acute Otitis Media was $109,386 per initial case and $890,296 per recurrent case, for pneumonia $569,643 per mild case and $4,310,895 per severe case, for meningitis and sepsis $10,792,183 per case, for hearing loss $1,323,775 and for mastoiditis $535,692. The costs of YPLL were $12,014,669. **CONCLUSIONS:** Pneumococcal diseases cause a high economic impact on public health resources, due the incidence of diseases.

PHS37

COSTS OF PSYCHIATRIC ASSISTANCE (PA) IN A BRAZILIAN HEALTH CARE PLAN (HP): A REAL WORLD DATA ANALYSIS

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OBJECTIVES: PA costs have increased during the last years, due to an increment in the number of affected patients. Our goal was to establish the profile and costs of PA in a health care plan in Brazil. **METHODS:** We searched the HP database in order to identify patients with psychiatric conditions. This HP has 364 000 users. We identified 569 patients that received psychiatric care during a 22-month period (January 2012-0ctober 2013). For each patient, we identified the resources used and the costs associated to them. **RESULTS:** Psychiatric care was responsible for 3.3% of all medical consultations performed in the HP and 4,955 hospitalizations, with a total cost of R$ 3 753 000 (US$ 1 563 000) (mean cost of R$ 4 560 (US$ 2 041) per patient). The most common diagnoses were substance abuse (ICD codes F10 to F19) and schizophrenia (ICD F20). Ancillary fees were responsible for 94% of total costs. Medications represented 7% of them. Antipsychotics drugs were responsible for 60% of the medication costs. **CONCLUSIONS:** PA is associated with a high cost in Brazil. Most costs are due to hospital fees.

PHS38

COST BURDEN OF CHRONIC PAIN IN A LARGE INTEGRATED DELIVERY SYSTEM IN THE UNITED STATES

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OBJECTIVES: Chronic pain is common and persistent in the population with over a third of US adults affected, many with disability and quality of life issues. Pain management is a substantial cost burden to the health care system We sought to determine the prevalence and burden of pain within a large integrated health care delivery system in the US. **METHODS:** Administrative databases pertaining to Henry Ford Health Systems (HFHS) patients were used to identify a cohort of adult persons with one or more of 25 pain conditions of interest in 2010 using ICD-9-CM diagnosis codes. Chronic pain was defined as at least two physician encounters at least 30 days apart. Data on prescription drug usage, hospitalizations, emergency room visits, physician encounters and total costs of care were obtained for a period of one year prior through one year after the index encounter for pain in 2010 to characterize resource utilization. Analyses were performed using SPS V 19.0. **RESULTS:** 44% of persons enrolled in the health plan had at least one pain encounter with 14% meeting the defined criteria for chronic pain. The conditions with the highest prevalence were joint pain, limb pain, and back pain. The study population also had a high prevalence of non-pain conditions including diabetes, chronic pulmonary disease, and renal disease. The overall medical costs for the patients with prevalent chronic pain conditions increased 24% in the post-period (average $22,639 vs. $31,692). The most costly conditions included diabetic neuropathy and multiple sclerosis and the greatest cost increases were observed for neuralgia, gout, and abdominal pain. Significant cost drivers included older age, presence of multiple comorbidities, and low body mass index. **CONCLUSIONS:** Chronic pain was a relatively frequent reason for health care service provision in HFHS and is associated with significant year-on-year increase in medical costs.