

67 clinical records were analyzed. The average cost per CHKV children patient was US\$517.5 (US\$756.9 in equal or older than 1 year old, and US\$375.1 in under one year population). The average length of stay was 2,7 days per patient. More prescript drugs were oral rehydration salts and acetaminophen. The more requested labs were hematic chart (13.8%) and protein C reactive (7.57%). **CONCLUSIONS:** Despite CHKV infection is not a lethal disease, it would cause a very huge impact in the health services and its associated cost in Colombia. Cost per case in children is high, and probably would be similar or higher in adult population.

PHS45

DIRECT COST OF HYPOTHYROIDISM AND ITS COMPLICATIONS IN UKRAINE

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OBJECTIVES: To determine the direct cost of health care technologies used for treatment of hypothyroidism in Ukraine. **METHODS:** We made the retrospective analysis of 81 patients's medical records with hypothyroidism that were hospitalized to the endocrinology department of Ternopil University Hospital (Jan-Dec 2012). The method of pharmacoeconomic analysis "cost of illness" was used to estimate the cost of health care for patients with hypothyroidism. We have made calculations of costs: the cost of laboratory analysis, the cost of instrumental analysis, the cost of drug treatment, doctor's consultations, costs of patient's stay in hospital. While determining the direct costs of medical services in monetary terms we used the rates for medical services that were in Ternopil University Hospital. **RESULTS:** The study found that among the patients there were 23 (28.4%) men and 58 (71.6%) women aged 19 to 77 years (46.86±10.03). All patients have got to the hospital in stage of medication subcompensation. The average duration of stay in hospital for patients was 10.77±1.95 days. The total cost of laboratory tests was USD 4,231.95. The costs of instrumental methods of patients examination amounted USD 576.90. The cost of consultations by specialists was USD 769.36. In determining the amount of direct costs for medicines we found that the cost of drug treatment of the underlying disease was USD 52.40, the cost of drug therapy of hypothyroidism complications was USD 3,932.21. Total cost of patients stay in hospital was USD 9,411.80. After calculation of all direct costs we determined that the total cost of hypothyroidism per patient is USD 234.26 per course of treatment. **CONCLUSIONS:** In the cost structure of health care provision for patients with hypothyroidism the most significant costs were spent for laboratory tests and for patient's stay in hospital. The presence of underlying disease complications significantly increases cost of drugs.

PHS46

CLINICAL AND ECONOMIC IMPACT OF THE INTRODUCTION OF THE VACCINE AGAINST MENINGOCOCCAL MENINGITIS C IN CHILDREN AGED 0-4 YEARS IN BRAZIL

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OBJECTIVES: To evaluate the clinical and economic impact of the incorporation of the monovalent conjugate vaccine against meningitis C caused by the *Neisseria meningitidis* bacterium in children aged 0-4 years in the Brazilian public health system. **METHODS:** The analysis was developed for the period of 2009 to 2013. Were considered the actual number of cases of the disease recorded in the Notification Information System and deaths from meningitis C obtained from the Mortality Information System, and the estimates of long-term sequelae (amputation, skin scarring, renal failure, neurological sequelae and deafness) and of the costs due to sequelae, disease and vaccination. **RESULTS:** From 2009 to 2013, a decrease in the quantity of cases (684, 651, 563, 399 and 300, respectively) and in the number of deaths due to meningococcal meningitis (134, 111, 68, 61 and 47, respectively) was observed. There was also a reduction in the costs related with disease management (R\$ 1,572,632.28, R\$ 1,496,759.67, R\$ 1,294,432.71 and, R\$ 917,368.83, respectively) and with meningococcal meningitis sequelae (R\$ 342,551.14, R\$ 336,322.94, R\$ 308,296.02, R\$ 210,513.24 and, R\$ 157,573.52, respectively). The three doses of the vaccine for children in their first year of life cost to the public treasury (R\$ 0.00, R\$ 270,863,108.24, R\$ 266,933,428.24, R\$ 263,150,498.68 and, R\$ 259,515,275.33, respectively). Therefore, the estimate of the value spent by the government in the evaluated years was R\$ 1,915,183.42, R\$ 272,696,190.85, R\$ 268,536,156.97, R\$ 264,278,380.76 and, R\$ 260,362,599.85. **CONCLUSIONS:** The Vaccine against meningococcal meningitis type C implementation in SUS (Unique Health System - Sistema Único de Saúde in Portuguese) – the national public health system in Brazil – in infants in their first year of life generated reduction of incidence, mortality and sequelae due to the disease, decreasing, over the years, the cost due to the disease and to its sequelae, although adding the cost with vaccination.

PHS47

PATIENT RECALL FOLLOWING BREAST CANCER SCREENING MAMMOGRAPHY AMONG MEDICAID PATIENTS BY PATIENT RACE

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OBJECTIVES: To describe the prevalence of patient recall in the six months following traditional screening mammography and the related costs to Medicaid by patient race. **METHODS:** The Truven Health MarketScan Medicaid Multi-State Database was used to identify women aged 40-75 years undergoing screening mammography (index event) in 2010-2012. Women were required to have 12 months pre- and 6 months post-index continuous enrollment and were excluded if they had mammography or a breast cancer diagnosis in the 12 month pre-index period. Recall was defined as receipt of diagnostic mammogram or ultrasound in the six months following the index screen; patients with a subsequent breast cancer diagnosis were excluded from recall counts or costs. Payer cost per recall (2013 US\$) was the sum of breast-related imaging and diagnostic procedures in the 6 months post-index, excluding patient payments and breast cancer treatment costs. **RESULTS:** A total of 20,838 women undergoing a new screening mammogram met the study selection

criteria, of which 3,152 (15.1%) underwent additional diagnostic imaging in the 6 months post-index. White women were 1.12 times more likely to be recalled than African-American women ($p<0.001$). Average costs per patient recalled were \$838 among white women and \$804 among African-American women. Overall, 28.6% of costs were from additional imaging (diagnostic mammography and/or ultrasound), 39.2% were from guided biopsy procedures, and 24.4% from open biopsy. Recall-related office visits, MRI, fine needle aspiration, and ductogram accounted for <5% of recall costs. Individual recall procedure rates were substantively similar between White and African-American recalled patients but African-American women had higher per-patient imaging costs and lower per-patient open biopsy costs. **CONCLUSIONS:** Improving breast cancer screening with a more accurate mammogram may significantly reduce Medicaid costs as approximately one-in-six women undergo additional diagnostic imaging following a screening mammogram with substantial associated costs. Recall rate and costs varied by race.

PHS48

DIRECT AND INDIRECT COSTS TO EMPLOYERS OF RECALL FOLLOWING SCREENING MAMMOGRAPHY AMONG FEMALE EMPLOYEES IN THE US

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OBJECTIVES: To describe the burden of recall following traditional screening mammography from the perspective of US self-insured employers. **METHODS:** The Truven Health MarketScan Commercial and Health and Productivity Management Databases were used to identify female employees aged 40-65 years undergoing screening mammography (index event) in 2010-2012 with at least 12 months pre- and 6 months post-index continuous enrollment; patients with a breast cancer diagnosis in the pre-index period were excluded. Recall was defined as receipt of diagnostic mammogram or ultrasound in the six months following the index screen. Employer cost per recall (2013 US\$) was the sum of breast-related imaging procedures and associated diagnostic procedure costs in the 6 months post-index, excluding patient payments and breast cancer treatment costs. Absenteeism costs were calculated using a wage constant (\$38/hour). **RESULTS:** Of the 339,912 patients who met the study criteria, 47,321 (13.4%) underwent additional diagnostic imaging within 6 months post-index with an average direct medical cost to employers of \$1,279 per patient recalled. Nearly one-fourth (23.4%) of recall costs was attributable to additional imaging (diagnostic mammography or ultrasound), 40.0% was attributable to guided biopsy and 28.0% attributable to open biopsy. One-fifth (21.9%) of recalled patients had at least two days with recall-related procedures while 4.2% had at least three recall event days. Absenteeism costs were \$948 in the 30 days following recall among patients with absenteeism claims (67.2%), increasing to \$4,472 over 6 months post-recall among patients with absenteeism claims (81.9%). Short-term disability claims increased following recall (4.0% vs. 4.4%, $p<0.01$), with an average cost per claim of \$10,849. **CONCLUSIONS:** Recall following traditional mammography represents a significant cost burden to employers with nearly one-in-six female employees with a new screening mammogram undergoing additional diagnostic imaging and associated procedures. Strategies to reduce the burden of recall should not ignore indirect employer costs.

PHS49

NOVEL APPROACH TO CATEGORIZING COSTS OF PATIENTS EXPERIENCING SEIZURES

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OBJECTIVES: Current cost studies describing people with epilepsy do not segment the populations by seizure type. This paper produces an economic model of people experiencing seizures, including individuals with epilepsy, broken into novel categories useful in assessing the potential effect of future interventions. **METHODS:** Three-year's worth of administrative claims data from Milliman's commercially-insured research dataset ($n=16.8$ million 2012) was grouped into benefit service cost categories. Individuals experiencing seizures were extracted whose coverage included prescription drugs and whose medical claims contained the following ICD9CM diagnosis codes: 345.00, 345.01, 345.10, 345.11, 345.2, 345.3, 345.40, 345.41, 345.50, 345.51 and 780.33. Individuals were grouped into three novel categories: Motor Seizures (345.10, 345.11, 345.3, 345.40, and 345.41), Post Traumatic Seizures (780.33) and Non-Motor Seizures (345.00, 345.01, 345.2, 345.50, and 345.51). **RESULTS:** Individual experiencing seizures represented 0.4% of the population and accounted for 1.8% of allowed claims dollars. The odds of being admitted to the hospital for the Motor and Non-Motor Seizure groups were 5.5 and 4 times higher, respectively, with a 2-day longer average length of stay and total allowed claims dollars were 5 and 4.2 times higher, respectively, than the standard population. The odds of being admitted for the Post Traumatic group was 9 times higher with an average length of stay almost 4 days longer and total allowed claims dollars were 6 times higher than the standard population. Other cost and utilization measures produced similar results. **CONCLUSIONS:** Individuals experiencing seizures are expensive when compared to the standard population. The excess utilization is in manageable healthcare cost categories. By utilizing these novel groups, case managers may find new ways to manage patients with epilepsy, target interventions and measure the success of those interventions.

PHS50

ESTIMATING THE COST OF PNEUMONIA CASES ADMITTED AT THE INTERNAL MEDICINE WARDS OF A TERTIARY GOVERNMENT HOSPITAL IN THE PHILIPPINES

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OBJECTIVES: In 2011, PhilHealth, the Philippine national health insurance provider, switched to a case rate scheme in tandem with a policy which prevents govern-