from eight managed care organizations. Index claims were outpatient or emergency department visits in 1999–2001 by individuals aged 25–64 with a primary diagnosis of pneumonia, antibiotic prescription within three-days, chest x-ray on index date, continuous enrollment for 12-months prior, 30-days after index visit. Exclusion criteria: antibiotic prescription, pneumonia diagnosis, or hospitalization in prior 30-days; initial therapy with multiple antibiotics; in prior 12-months residence in a long-term care facility or diagnosis of lung cancer, secondary malignancy, HIV/AIDS, cystic fibrosis, immunodeficiency. We considered the following comorbid illnesses: chronic liver, renal or lung disease; cerebrovascular disease; cardiac disease; diabetes mellitus; malignancy. Follow-up claims were considered CAP-related if the primary diagnosis, using the Clinical Classifications Software, was pneumonia; sepsis; pleurisy; pneumothorax or pulmonary collapse; respiratory failure, insufficiency or arrest; other lower respiratory infection. RESULTS: In total, 5748 cases met criteria; 79.7% had no comorbidities, 16.8% had one comorbidity, and 3.5% had two or more comorbidities. Mean total charges were $955.97; 48.2% inpatient, 25.2% outpatient, 13.4% outpatient testing and diagnostics, 7.5% antibiotic prescriptions, 5.8% emergency department, 13.9% presenting to the emergency department had initial mean charges of $360.48 compared with mean initial charges for outpatients of $167.89. In total, 50.0% utilized follow-up services with 3.0% requiring hospitalization. Mean total charges for those eventually hospitalized were $16,436.23 compared with $673.71 for the 13.1% of patients who failed initial treatment but were not hospitalized, and $431.91 for the 78.0% of patients requiring no additional antibiotics. Number of comorbidities was strongly associated (p < 0.0001) with charges: $888.19 for those without comorbidities vs. $1734.37 for those with multiple comorbidities. CONCLUSION: Cost of outpatient CAP for non-elderly adults is large even for those without comorbid illness.

IMPACT OF COMPLICATED SKIN AND SOFT TISSUE INFECTIONS ON INPATIENT COSTS FOR AN ACADEMIC MEDICAL CENTER

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OBJECTIVES: To determine the additional costs and lengths of stay (LOS) attributable to complicated skin and soft tissue infections (cSSI) for patients admitted to Thomas Jefferson University Hospital, an urban academic tertiary care hospital. METHODS: All patients admitted between January 1, 2003 and December 31, 2003 were identified using the hospital billing system. Patients with a potential cSSI were identified using the specific ICD-9 diagnosis codes. Costs of care and lengths of stay, based on the hospital’s true cost accounting system, were compared by Diagnosis Related Group (DRG) between the cSSI population and the non-cSSI population. RESULTS: Of the 33,764 patient discharges in 2003, 1,883 (5.5%) included one of the cSSI diagnosis codes; these encompassed 225 DRGs. The mean cost for cSSI cases was $20,965 higher than for non-cSSI cases, and mean LOS was ten days higher for cSSI cases. For surgical and medical DRGs, mean cost of cSSI added $42,563 onto the cost for cases in surgical DRGs compared to an average increase of $10,048 added to cost of medical DRGs. Differences in costs and LOS were observed in analyses by Major Disease Categories (MDCs) and individual DRGs as well. For MDCs, myeloproliferative disorders, multiple trauma, and diseases of the nervous system, costs were $68,027, $48,286, and $27,496, higher for the cSSI cases, respectively. This difference was also reflected in additional days of stay of 22, 11, and 14 days, respectively. For patients with cSSI, the three specific DRGs responsible for the maximum total health care dollars expended were bone marrow transplants, rehabilitation, and small and large bowel procedures. CONCLUSIONS: cSSIs significantly increase hospital resource consumption and costs. The difference in costs is especially pronounced for patients undergoing surgical procedures. Results suggest that measures taken to avoid or more effectively treat cSSIs could yield significant savings to hospitals.

A COMPARISON OF METHODS TO ASSESS QUALITY OF LIFE IN ECONOMIC ANALYSES OF HEPATITIS C TREATMENTS

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OBJECTIVES: This study investigated the effect of using different utilities for a cost-utility analysis comparing peginterferon alpha-2b plus ribavirin, interferon alpha-2b plus ribavirin, and no treatment for chronic hepatitis C from a U.S. payer’s perspective. METHODS: A Markov model was developed to simulate the lifetime disease progression of hepatitis C virus (HCV) for a 45-year-old male. The analysis was conducted by stratifying HCV genotypes. Health-state utilities were obtained from previously published literature. Standard gamble patient-elicited utilities were used as the base case. Five other expert-estimated...
utilities were compared to the patient-derived utilities. Treatment data, disease transition probabilities, and hepatitis C related costs were obtained from published literature. The costs of hepatitis C treatments were obtained from an Internet pharmacy.

All costs were adjusted to 2004 USD. RESULTS: When patient-reported utilities were used for HCV genotype 1, peginterferon gained 1.28 additional quality-adjusted life years (QALYs) compared with no treatment. The QALYs ranged from 0.71 to 2.35 when expert panel-estimated utilities were employed. For HCV genotype 2 or 3 patients, peginterferon had 2.72 more QALYs than no treatment. Using patient-derived utilities, the expected costs per QALY for HCV genotype 1 receiving peginterferon and interferon treatment were $2439 and $2333, respectively. For genotype 2 or 3, these costs were $1152 and $1085 per QALY, respectively. The lifetime HCV related cost for patients received no treatment was $1975 per QALY regardless of HCV genotype.

CONCLUSION: Many expert panel-estimated utilities provided higher estimates of the benefits, and thus lower cost per QALY, for HCV treatments as compared to patient-reported utilities.

PIN18
ESTIMATES OF HEALTH CARE COSTS FOR LAMIVUDINE-REFRACTORY CHRONIC HEPATITIS B (CHB) PATIENTS
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For patients with chronic hepatitis B, emergence of lamivudine resistance is associated with poor clinical outcomes, more rapid disease progression and poor quality of life. The clinical implications of lamivudine resistance are well described but the health care costs are not. OBJECTIVE: The objective of this study was to evaluate the health care utilization and direct medical cost within the first year of developing a lamivudine refractory infection in chronic hepatitis B (CHB) patients.

METHODS: Physician estimates of health care utilization for the care of lamivudine refractory CHB patients were collected in a survey of physicians treating CHB patients in the US. A questionnaire was mailed to 165 physicians of which 51 responded. Data on health care utilization was computed for each health care cost category (Physician visits, hospitalizations, diagnostic tests and radiological examinations). Unit costs were derived based on the Medicare Physician Fee Schedule for procedures, the 2002 Health Care Cost and Utilization Project database for inpatient hospitalization costs, and average wholesale prices for medication costs.

RESULTS: The total non-drug, direct medical cost within the first year of developing a lamivudine refractory infection in a CHB patient was estimated at $2925. Among the different cost categories diagnostic tests and specialist visits were the major cost drivers, accounting for an estimated 45% and 41% of the overall cost, respectively. Seventy four percent of the patients were estimated to require a specialist visit. Only 2% of patients were estimated to require a hospitalization accounting for a negligible proportion of the costs.

CONCLUSION: The estimated non-drug costs for patients refractory to lamivudine represent a substantial economic burden. In addition, the additional costs of rescue therapy further increase the cost impact and make it considerably higher than the annual direct medical cost for CHB patients who do not develop viral resistance.

PIN19
UTILISATION OF ANTIBIOTICS WITHIN THE SLOVAK REPUBLIC
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OBJECTIVES: To analyse the utilisation of antibiotics within the Slovak Republic between 1992 and 2003. Adherence to principles of antibiotic policy lead to fundamental short and long term financial savings within health care systems. METHODS: For 1992–2003, the data of systemic antibiotic use for ambulatory care, aggregated at the level of the active substance, were collected, in accordance with the Anatomic Therapeutic Chemical (ATC) classification and Defined Daily Dose (DDD) measurement unit (WHO). Data of wholesalers, who are legally obliged to provide this information to the Slovak Institute for Drug Control, was used for this detailed analysis of the Slovak consumption of antibiotics. RESULTS: Long term analysis shows that the antibiotic consumption had been increasing in human medicine within Slovakia. In 1992 the consumption of antibiotics at the level of 19.4 DDD/1000/day increased to 28.0 DDD/1000/day in 1999. This analysis focused on the situation in antibiotic consumption in 2001 and 2003 in more detail. The results show that in 2003 as opposed to 2001, the consumption of antibiotics decreased by 900,000 packages. In financial figures can be noticed a increase by 1.75 €/ml., because the average price for one package of antibiotics was at the level of 4.84 € in 2001 but in 2003 the price increased to a level of 5.64 €. From our analysis a significant increase in the ATB consumption expressed by DDD/1000/day can be seen (In 2001 it was 25.78 but in 2003 we can see the consumption 26.95 DDD/1000/day).

CONCLUSIONS: Inseparable components of the Slovak antibiotic policy must be viewed realistically with regard to the consumption of antibiotics and resistance. Antibiotic resistance is a major public health problem, and antibiotic use is increasingly recognised as the major selective pressure driving this resistance.

PIN20
IMPROVEMENT IN ANTIMALARIAL DRUGS ACCESS: RESULTS OF A PROGRAM PERFORMED IN YAOUNDE
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OBJECTIVES: Several studies show that in developing countries, low-income patients use low price counterfeit drugs provided by the illegal drug market. In Cameroon, those false drugs represent 40% of the street market and lead to malaria therapeutic failure and inappropriate medical expenses. The Yaoundé program aims to improve access to efficient antimalarial drugs by providing a differentiated price policy through the official private pharmacy distribution sector, allowing access to efficient antimalarials to low–income population which would otherwise use street market drugs. METHODS: In 31 retail pharmacies of Yaoundé, artemisunate (Arsumax®) was made available at a “no profit no loss” public price of 1170 FCFA (1.78 €) instead of 3400 FCFA (5.86 €), ie: –66%. Eligibility of patients was based on income below the poverty level (established by the Ministry of Economy as 30 €/monthly households incomes per number of dependences). Program effectiveness was assessed by evaluating the number of new patients having access to this lower price Arsumax®. RESULTS: After 6 months of implementation,