and parasitic diseases, Sofia, Bulgaria, 4 Bulgaria, ECONOMIC IMPACT OF THE ANTIRETROVIRAL PHARMACOTHERAPY ON COST
mental economic impact of non-CF bronchiectasis to a health plan was $1345 per event to whom they were matched. Cases had no medical claim for cystic fibrosis December 31, 2009. Index event for cases were defined as the first medical claim of To determine the cost of non-CF bronchiectasis patients enrolled in a HMO, or PPO type of health plan. Overall comorbidity burden as measured by the

viral load. ANALYSIS: Of patients’ records in major clinic for immunosuppressed patients at the

infected newborns and years of life lived with disability (YLD) by applying the relevant
disability weights of 0.123 for each year lived with HIV and 0.5 for the last year of life with AIDS. All costs and life years are discounted at 3% annually. RESULTS: The total annual direct cost resulting from mother to child transmission of HIV is estimated at 592,480 disability adjusted life years (DALY’s), which is defined as the sum of YLL: 572,662 and YLD: 19,818. The discounted net present value of future health care costs associated with mother to child transmission of HIV is estimated at US$73.3 Million. CONCLUSIONS: Mother to child transmission of HIV is associ- ated with substantially increased costs as compared to children infected with HIV born to HIV-negative mothers. These results are estimated to be hard-to-treat, with significant excess RSV-associated deaths, hospitalisations, GP-visits and antibiotic prescriptions were found. The burden of RSV increased with age and was higher for high-risk (HR) elderly than for low-risk (LR) elderly. For several scenarios vaccina- tion of the Dutch elderly appeared to be cost-effective. Using base-case assumptions, the amount of money that can be spent per vaccination, while remaining costs that ranged from £26 to £180 vaccinating all 60+ elderly to £68 when vacci- nating only 85+ elderly, for a willingness to pay of £50,000 per QALY and a vaccine effectiveness of 70%. For HR-elderly only these estimates ranged from £52 to £99. CONCLUSIONS: Vaccination of Dutch elderly with a hypothetical RSV vaccine was found to be cost-effective for several recruitment scenarios. Vaccination is more likely to be cost-effective when vaccinating only HR elderly than when vaccinating all elderly, despite a decreased life expectancy and quality of life and a decreased effectiveness of the vaccine assumed in HR-elderly in the model. This study shows the major burden of RSV in the Dutch elderly, potential cost-effectiveness of vaccination, stressing the need to have an effective vaccine available shortly.

PINS2
ECONOMIC BURDEN OF NON-CF BRONCHIECTASIS ENROLLED IN A MANAGED CARE PLAN
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OBJECTIVES: To determine the cost of non-CF bronchiectasis patients enrolled in a managed care plan. METHODS: Data were obtained from a large employer-based claims database. A cohort of bronchiectasis patients (cases) with and without acute exacerbations were identified using ICD-9 494.0 and 494.1 codes and matched (1:3) on demographics to those without the disease (controls) from January 1, 2005- December 31, 2009. Index event for cases were defined as the first medical claim of bronchiectasis during the study period and controls were assigned the same index event and matched. Cases had medical claims for non-CF bronchiectasis and chronic obstructive pulmonary disorder 12 months prior (baseline) and post index event. Medical resource use and expenditures were estimated for 12 months before and after index event. All statistical tests were conducted using SAS 9.2. RESULTS: The final study sample included 9,146 cases and 27,438 matched controls 64% and 50% of the sample was females and between 45-64 years of age at index date, respectively, 37%, 29%, and 27% of the sample was enrolled in a POS, HMO, or PPO type of health plan. Overall comorbidity burden as measured by the Charlson comorbidity score and respiratory conditions other than bronchiectasis were substantially higher at baseline than in the study controls. The incremental overall ($2,128 vs. $783) and respiratory-related ($896 vs. $100) costs were significantly (p<.001) greater among cases vs. controls. The difference was primar- ily driven by an increase in outpatient care visits (2.21 vs. 0.43), emergency room visits (1.45 vs. 0.08) and other claims. Varying recruitment scenarios resulted in estimated NHS costs being £52.4 million (average £273/female; £278/male patient). The proportion hard-to-treat was the highest for HR elderly. No significant excess RSV-associated deaths, hospitalisations, GP-visits and antibiotic prescriptions were found. The burden of GW increased with age and was higher for high-risk (HR) elderly than for low-risk (LR) elderly. For several scenarios vaccina- tion of the Dutch elderly appeared to be cost-effective. Using base-case assumptions, the amount of money that can be spent per vaccination, while remaining costs that ranged from £26 to £180 vaccinating all 60+ elderly to £68 when vacci- nating only 85+ elderly, for a willingness to pay of £50,000 per QALY and a vaccine effectiveness of 70%. For HR-elderly only these estimates ranged from £52 to £99. CONCLUSIONS: Vaccination of Dutch elderly with a hypothetical RSV vaccine was found to be cost-effective for several recruitment scenarios. Vaccination is more likely to be cost-effective when vaccinating only HR elderly than when vaccinating all elderly, despite a decreased life expectancy and quality of life and a decreased effectiveness of the vaccine assumed in HR-elderly in the model. This study shows the major burden of RSV in the Dutch elderly, potential cost-effectiveness of vaccination, stressing the need to have an effective vaccine available shortly.

PINS3
COSTS OF MANAGING GENITAL WARTS IN THE UK
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OBJECTIVES: Cases of genital warts (GW), caused by human papillomavirus (HPV), remains a significant problem in the UK. Costs to the National Health Service (NHS) to manage GW have been recently estimated, but studies excluded treatment by General Practitioners (GP) and costed resources without inclusion of full staff time and overheads thereby underestimating the full cost impact. This study estimates the cost of GW management taking account of all identified GW cases seeking care and applying the full NHS cost algorithm. METHODS: The number of GW cases obtained from the surveillance of Genitourinary Medicine (GUM) clinics by Health Protection Agency (HPA) and estimated number of GP visits (using THIN data) for GW were combined and projected to 2010. The number of visits and therapy re- quired for GW management were estimated by GUM experts for standard and hard-to-treat patients. NHS payments by results (PbR) tariffs were applied to esti- mate GUM resource costs and GP visit and therapy costs estimated from FPSRU and BNF data. RESULTS: Extrapolating to 2010, there were 173,077 GUM clinic (33.5% recurrent, 11% persistent) and 16,882 primary care GW episodes excluding referrals to GUM. Approximately 2% of cases were estimated to be hard-to-treat, requiring additional visits and resources. Resulting NHS costs were £52.4 million (average £273/female; £278/male patient). The proportion hard-to-treat was the most sensitive variable for overall national costs. CONCLUSIONS: The £52.4 million includes the full per patient costs for GUM clinics and costs for GP visits not previ- ously estimated. This is higher than previous estimates and reflective of real NHS costs. The full cost of GW management is important to understand and quantify when considering the potential value of introducing a quadrivalent HPV vaccina- tion in the UK. This is relevant from both a public health and health economic perspective.

PINS6
SURGICAL SITE INFECTION INCIDENCE AND BURDEN ASSESSMENT USING MULTI-INSTITUTIONAL REAL-WORLD DATA
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OBJECTIVES: Surgical site infections (SSI) are a significant burden to healthcare systems globally. Early identification and effective treatment is important for quality and hospital repu- tation. This study examines the economic impact of SsIs across multiple institutions in the United States (US) using more up-to-date real-world data METHODS: The economic impact of SSIs was evaluated in surgical procedures (colorectum, hernia, CABG surgery, total knee replacement, c-section, hip and knee prosthesis, spinal fusion, abdominoplasty and breast surgery). The data source was the Premier Perspective™ Comparative Database, a national administrative discharge database (2007-2010) from about 500 hospitals throughout the US. The SSIs were identified by a combination of post-operative infection diagnosis codes, or postop-
length of stay (LOS) and costs. Results were projected to the national level. Generalized linear models were used for the analyses. Covariates included severe patient-level comorbidities and hospital characteristics. RESULTS: SSI incidence was highest among colon surgery [12.0%, 95%CI:11.78-12.24%] and CABG [6.1%, 95%CI:5.88-6.2%] cases, and lowest among C-section [0.3%, 95%CI:0.28-0.31%] and vaginal hysterectomy [0.16%, 95%CI:0.13-0.2%] cases. The projected national cost of SSI in Sweden, using existing data and multiplied by the National Health Safety Network reported rates. Among all surgical procedures, health resource use associated with CABG and colon surgery cases were most affected by SSI. SSI resulted on an average 10.58 [SD 2.78; 95%CI:10.56-10.60] days and 401 [SD 200; 95%CI:399-402] per patient. Overall costs of additional LOS and $38,796 [SD $8,555; 95%CI:$38,741-38,850] and $19,349 [SD $5,720; 95%CI:$19,315-$19,383] of additional costs in CABG and colon procedures respectively. CONCLUSIONS: Despite rise in infection control practices postoperative SSIs continue to remain associated with significant increases in LOS and hospitalization costs.

PIN37 THE COST OF MANAGING CHRONIC HEPATITIS C IN SWEDEN: HEALTHCARE RESOURCE UTILIZATION IN DIFFERENT STAGES OF THE DISEASE

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OBJECTIVES: Approximately 3% of the global population is infected with the hepatitis C virus. 20% of the patients will develop cirrhosis within 20 years of infection, and these patients have a 1 to 5% risk per year of developing hepatocellular carcinoma (HCC). Since current treatment for hepatitis C-related cirrhosis is pegylated interferon combined with ribavirin. The objective of this study was to obtain an understanding of the resource utilisation and costs associated with chronic hepatitis C in Sweden.

METHODS: A literature review was conducted to identify resource utilisation and costs of chronic hepatitis C in Sweden. The MEDLINE, EMBASE, NHS EED and Cochrane CTR databases were searched. To validate the results of the literature review and fill gaps in the evidence base, interviews were conducted with eight clinicians and one nurse specialised in the areas of infection, gastroenterology or transplantation medicine. The Skåne price list was primarily used to obtain the unit costs.

RESULTS: Twelve publications were relevant for inclusion in the review. There was a lack of resource utilisation data for certain disease stages, primarily decompensated cirrhosis and HCC, and for updated unit costs, in these publications. As a result, no specific indirect costs associated with chronic hepatitis C in Sweden were pooled.

COSTS: Costs for basic diagnostics including determination of HCV genotype and medical visits, treatment and monitoring of HCV infected patients according to the German guidelines were analysed for basic diagnostic procedures, monitoring and treatment of patients with and without cirrhosis. Costs were modelled according to treatment duration (16 to 72 weeks) depending on the sustained viral response and HCV genotypes. Costs were calculated according to the German outpatient fee scale.

CONCLUSIONS: Many patients with chronic hepatitis C were misclassified. Costs were calculated according to the German outpatient fee scale. The overall direct medical costs of the treatment of chronic hepatitis C in Sweden are: I – ertapenem (1,0 gr intravenously (iv.) 1 time/day); II – cefotaxim (1,0 gr im. 3 times/day); III – rifampicin + cotrimoxazol 2 times/day; IV – linezolid (600 mg bid) IV can be switched to PO after 4–5 days; V – imipenem + cilastatin 500/500 mg iv. 4 times/day; VI – cefepim (2,0 gr iv. 2 times/day and metronidazol 100 ml (sol.0,5%) iv. 3 times/day); VII – cefoperazone + sulbactam (2,0 gr 3 times/day); VIII – meropenem (500 mg iv. 1 time/day and metronidazol 100 ml (sol.0,5%) iv. 2 times/day); IX – ciprofloxacin 400 mg iv. and metronidazol 100 ml (sol.0,5%) iv. 2 times/day. Three variants for each scheme were calculated: the schemes with original drugs, the schemes with generic drugs and the schemes with Asian generics. The costs of treatment at ART were calculated in accordance with the Clinical Protocol of acute peritonitis treatment.

RESULTS: The costs range of treating one patient with acute peritonitis with original drugs is 3891 USD (scheme II) - 7994 USD (scheme VI). The costs range with generics of hepatitis C infection in Sweden is 1924 USD (scheme V) - 5413 USD (scheme VIII) (1 EUR = 11,65 USD). CONCLUSIONS: The costs of treatment schemes for patients with acute peritonitis with use of less expensive generic drugs are not always cheaper than the costs of original drugs using. The optimal schemes for treatment of patients with acute peritonitis were selected.

LINEZOLID VERSUS VANCOMYCIN FOR SKIN AND SOFT TISSUE INFECTIONS BY METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS: A COST COMPARISON ANALYSIS UNDER THE PUBLIC HOSPITAL PERSPECTIVE IN BRAZIL

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OBJECTIVES: Seventy-nine percent of the skin and soft tissue infections (SSTI) are caused by staphylococcus aureus, from which 1/3 is methicillin-resistant staphylococcus aureus (MRSA). This study aims to compare SSTI MRSA treatment costs with linezolid versus branded and generic vancomycin under the Brazilian public payer perspective.

METHODS: A cost comparison study was performed to compare linezolid versus generic and branded vancomycin. As supported by clinical studies, overall treatment duration of 15 days with linezolid and 14 days with vancomycin was considered, using PO linezolid after a minimum 4-days cycle of IV infusion while vancomycin (1g bid) was entirely IV. A decision-tree model simulated SSTI treatment assuming linezolid (600mg bid) IV can be switched to PO after 4–5 days and patients can be discharged if PO is implemented at physician discretion.

RESULTS: The linzolid scheme with 4–5 days IV (LOS −4–5 days) and 11–12 PO days resulted in overall costs per patient of 2,540 USD, while branded and generic vancomycin exhibited 3,466 USD and 3,663 USD, respectively. The incremental cost of vancomycin-treated patients was driven by hospital daily charges, responsible for over 60% of the overall vancomycin costs. One-way sensitivity analysis revealed that the time for linezolid up to LOS −9 days, with overall costs per patient ranging from 2,540–4,548 USD even if IV therapy was maintained throughout the inpatient period (LOS −15 days).

CONCLUSIONS: Linezolid exhibited a cost-saving profile over branded or generic vancomycin for the treatment of SSTI MRSA under the Brazilian public payer perspective. This economic benefit was a direct result of potential early discharge of patients receiving PO linezolid.

PIN41 COST-BENEFIT ANALYSIS OF REGIONAL PROCURED ESSENTIAL MEDICINES IN THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) WITH A FOCUS ON ACCESS TO ANTIRETROVIRAL DRUGS

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OBJECTIVES: SARFAM is a programme, designed to ensure the improvement of access to quality essential medicines in SADC. An economic appraisal was undertaken from a societal perspective to assess the economic feasibility of SARFAM's implementation. The evaluative framework considered elements linked to improved access to quality medicines which included regional procurement of ARVs.

METHODS: Direct healthcare costs were estimated as the incremental investment needed to effectively implement regional cooperation processes over a 4 year period. Direct healthcare benefits were defined as the “negative costs” incurred due to savings in direct medical costs and savings and costs avoidance. The programme was based on the well-established advantages of regional procurement cooperation. Indirect health care benefits were estimated using the Human Capital Approach.

RESULTS: In total, an investment of US$14 million in SARFAM (discounted at a rate of 4%) over a four-year period will result in overall economic benefits of between US$20 million to US$22 million.

CONCLUSIONS: There is compelling evidence that the implementation of SARFAM could have a positive impact on access to quality medicines in SADC. An economic appraisal was undertaken from a societal perspective to assess the economic feasibility of SARFAM's implementation. The evaluative framework considered elements linked to improved access to quality medicines which included regional procurement of ARVs.