relative to IIV3, IIV4 is expected to avert an additional 2,516 influenza cases, 1,683 influenza-associated medical visits, 27 influenza-associated hospitalizations and 5 influenza-associated deaths. From a societal perspective IIV4 would generate 76 more QALYs and a net societal budget impact of $2,265,769. The incremental cost effectiveness ratio (ICER) for this comparison was $29,738/QALY. 74% of simulations in a probabilistic sensitivity analysis were below $100,000/QALY and 29% were dominant. In a scenario analysis, the ICER was $94,248 per QALY from a third party payer perspective. **CONCLUSIONS:** IIV4 is expected to achieve reductions in influenza related morbidity and mortality compared to IIV3. Further, despite not accounting for herd protection IIV4 is still expected to be a cost effective alternative to IIV3. Our conclusions were robust in the face of sensitivity analyses.

PIN68

USING BAYESIAN MODELLING TO ESTIMATE THE COST EFFECTIVENESS OF TELAPREVIR AND BOCEPREVIR IN ITALIAN NAÏVE PATIENTS WITH HEPATITIS C

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OBJECTIVES: The aim of this study is to assess the economic impact of new strategies involving the administration of triple therapy (PEG IFN , ribavirin and telaprevir or boceprevir) to naive patients with chronic hepatitis C (CHC). **METHODS:** economic results were evaluated along a 30 – years time horizon. Seven health states were considered in our model: CHC genotype 1, sustained virologic response (SVR), compensated cirrhosis, decompensated cirrhosis, HCC, liver transplantation and death. The effectiveness of telaprevir in naïve patients was inferred from ADVANCE trial, whilst the effectiveness of boceprevir was inferred from the SPRINT 2 trial. Quality of life (QoL) scores were used to adjust the years gained by patients enrolled in the model. Resource consumption was estimated from the Italian SSN perspective. Costs and benefits were discounted at a rate of 3.5%. To map the uncertainty of the model resulting from the Bayesian analysis, a probabilistic sensitivity analysis was carried out. **RESULTS:** In both cases the ICER is likely to be under an hypothetical threshold of € 20.000 – 30.000. However, strategy which includes treatment with teelaprevir is proven to have a more favorable cost effectiveness ratio.(€ 12.000 vs € 14.000). In the case of telaprevir probability of being under the threshold of € 30.000/QALY is 100/, whist for Boceprevir probability is 70%. **CONCLUSIONS:** In general, the provision of either telaprevir and boceprevir was proved to be affordable compared to the standard of care.

PIN69

ECONOMIC IMPACT OF A 13-VALENT PNEUMOCOCCAL CONJUGATE VACCINATION PROGRAMME IN A MEXICAN CORPORATE SETTING

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OBJECTIVES: An elevated number of absence days and disability affect both employers and employees as a result of pneumococcal diseases. This study aims to estimate the impact of a 13-Valent Pneumococcal vaccination program from employer´s perspective in a medium size Mexican-Corporate setting. **METHODS:** A decision tree was built in order to estimate yearly productivity losses and absence days avoided, as well as pneumococcal disease treatment costs. Local incidence of pneumococcal diseases as well as mortality rates were extracted from published and Mexican Government databases. Treatment costs were retrieved from the most representative Mexican public health care provider. The cost of the vaccine was provided by the manufacturer. A base scenario of a 1,000 employee company with a homogeneous distribution of ages (18<x<65) was assumed to show the potential benefits of the program in patients between 50 and 65 years old (average monthly wage: US$779). Productivity losses are expressed in 2013 US$ (5% discount rate/year). A bivariate sensitivity analysis of both, vaccine cost (+10%) and effectiveness (-10%) was performed. **RESULTS:** Assuming 50% employee enrollment into the program, and vaccination cost split 50/50 between employer and employee, a single employer investment of US$50 per program participant could potentially generate savings of US$33 for each over a ten year horizon. We estimate 395 absence days can be avoided, representing avoided productivity losses as high as US$8,315 across all participants in ten years. The program becomes cost-saving at year 7, however absences are avoided from the first year. The total treatment plus productivity losses of an invasive infection, in- and outpatient pneumonia are respectively 54, 34 and 47 times higher than the vaccination outlay. Outcomes were robust to a 10% variation in both vaccination cost and effectiveness. **CONCLUSIONS:** A 13-Valent Pneumococcal vaccination program could bring potential savings for employers from the seventh year of implementation.

PIN70

EPIDEMIOLOGICAL AND ECONOMIC BURDEN OF SURGICAL SITE INFECTIONS (SSIS) ASSOCIATED WITH HIP ARTHROPLASTY

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OBJECTIVES: SSIs are post-surgical complications that are associated with substantial economic burden. Patients who undergo hip arthroplasty may develop SSIs, with seriously affected individuals typically requiring costly interventions including revision surgery or possibly removal of prostheses. The objective is to review the global epidemiology and burden of SSIs following hip arthroplasty, with a focus on *Staphylococcus aureus* (*S. aureus*). **METHODS:** A comprehensive search was conducted in PubMed and relevant conference abstracts; 240 publications were reviewed to identify the epidemiology and burden of SSIs associated with hip arthroplasty published between 2003 and 2013. **RESULTS:** The median SSI infection rate as a percent of all hip arthroplasties was 1.8% (range: 0.05%-28%). Median 44% (18%-60%) of SSIs after hip arthroplasty were attributed to *S.aureus*. Methicillin-resistant *S.aureus* (MRSA) infection rates (% all *S.aureus* infections) from three studies were calculated as 16%, 31% and 56%, with variations in the range likely due to small sample size. Length of stay (LOS) prolongation for patients who developed SSIs after hip arthroplasty—compared to non-infected patients— ranged from 5.4 to 54 days. Differences in populations and outcome measures in studies evaluating mortality, readmissions and costs due to SSIs associated with hip arthroplasty precluded group analysis. A representative example of results from one US study reported the average total charges (in 2006 US$) of treating SSIs in patients who underwent primary total hip arthroplasty to be $73,452 compared to $38,588 to treat non-infected patients. In addition, a UK study showed that treating MRSA infections further exacerbated outcomes, with excess mean LOS of 14 days and increased costs of £4,465 compared to non-MRSA infections in 2004. **CONCLUSIONS:** SSI infections after hip arthroplasty impose additional cost; an important portion of SSIs are associated with *S. aureus*. An unmet need for targeted preventive strategies to reduce the consequences of SSIs is highlighted.

INFECTION – Patient-Reported Outcomes & Patient Preference Studies

PIN71

POOR ADHERENCE TO HCV MEDICATION IN A MEDICAID POPULATION

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OBJECTIVES: In a real-world setting, adherence to antiviral therapies is often subpar and treatment outcomes are consequently compromised. This study evaluated the adherence rate to HCV therapy in a Medicaid population. **METHODS:** Patients eligible for this study were Texas Medicaid patients ≥18 years who had evidence of chronic HCV during the identification period (1/1/07 – 9/30/11) and were continuously enrolled throughout the assessment period. Primary outcome was adherence to pegylated interferon (Peg-IFN) and telaprevir (TLV) or boceprevir (BOC) as measured by proportion of days covered (PDC) using refill history. Univariate and multivariate logistic regression analysis evaluated predictors for adherence, such as age (<55, ≥55), gender, Charlson comorbidity index (CCI), race (Whites vs. Non-Whites), presence of medical/psychosocial comorbidities, number of prescription drugs and office visits (intervals of 10), and evidence of adherence to other chronic medications (coronary artery disease and diabetes). **RESULTS:** A total of 24,032 patients were identified as having chronic HCV; 9.4% with evidence of receiving HCV treatment. Of those treated, 11.2% were initiated on therapy with either TLV or BOC in 2011. The average HCV medication PDC was 70% with a significant difference between the first 12 weeks and the following 12 weeks of therapy (79% vs. 60%, $p<0.001$). Significant positive independent predictors of HCV medication PDC greater than 70% included male gender (OR: 1.42, 95% CI: 1.08-1.86), higher number of non-HCV prescription drugs (OR: 1.11, 95% CI: 1.02-1.21) and higher number of outpatient visits (OR: 1.19, 95% CI: 1.08-1.31). Age, CCI, race and adherence levels to other chronic medications were not significant independent predictors for HCV medication PDC. **CONCLUSIONS:** Overall adherence for HCV therapy was poor (70%), especially after the initial 12 weeks of therapy (60%). Closer follow-up and management of other comorbidities may improve readiness to HCV therapy and improve treatment adherence.

PIN72

PNEUMOCOCCAL VACCINATION COVERAGE IN IMMUNOCOMPROMISED ADULTS IN THE UNITED STATES

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OBJECTIVES: Adults with immunocompromising conditions have higher chances of developing pneumococcal disease and should receive pneumococcal vaccination based on the recommendations by U.S. Centers for Disease Control and Prevention. This study examined pneumococcal vaccination in immunocompromised adults, including patients with chronic renal disease (CRD), cancer, HIV infection, and patients who underwent transplant. **METHODS:** A large administrative claims database was used to assess the pneumococcal vaccination among adults aged 19-64 years who were newly diagnosed with CRD, cancer, HIV, or patients underwent organ transplant procedure during 2007-2010. These patients were followed until 2011 or the end of enrollment to identify whether they received pneumococcal vaccination after the diagnosis or procedure. Multivariate logistic regression was used to examine patients characteristics associated with pneumococcal vaccination coverage. **RESULTS:** We identified 22,862 patients with CRD, 216,658 with cancer, 2,576 with HIV infection, and 41,889 patients underwent transplant procedure during the study period. The pneumococcal vaccination coverage were 7.3% among patients with newly diagnosed with CRD, 4.8% among cancer patients, 31.0% among HIV patients, and 5.2% among patients underwent transplant. Immunocompromised patients with more hospitalizations during the follow-up period had higher coverage, except for HIV patients. Coverage was consistently higher with more visits to doctor office and pharmacy across all immunocompromising conditions. The majority of immunocompromised patients received their vaccines at the primary care physician's (PCP) office (68.4% among patients with CRD, 70.0% among cancer, and 75.0% among transplant) except for HIV patients (45.2% at PCP office vs. 45.7% at specialist office). Vaccination out-of-pocket costs ranged from $3.41 (HIV) to $11.06(CRD) for immunocompromised patients. **CONCLUSIONS:** Pneumococcal vaccination coverage was highest in HIV patients and lowest in cancer patients among all immunocompromising conditions. However, even HIV population did not meet Healthy people 2020 target for immunocompromised patients (60%). A more efficient immunization strategy should be developed to improve pneumococcal vaccination coverage for the immunocompromised adults.

PIN74

PATIENT MANAGEMENT PROGRAMS LEAD TO IMPROVED ADHERENCE FOR PATIENTS WITH HEPATITIS C USING DRUG DUAL THERAPY IN BOTH RETAIL AND CENTRAL PHARMACIES

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