

room visits and hospital admissions. Logistic regressions were constructed to estimate the predictors for resource utilization, and a two-part multivariable analysis model was used to determine the total costs of treatment in the UK. **RESULTS:** Data on 731 patients receiving SMV with pegylated interferon and ribavirin (PegIFN/R) or PegIFN/R alone were included in the analysis. While MRU was similar between SMV and PegIFN/R groups, MRU-related costs were significantly lower in the SMV group, compared to the PegIFN/R group ( $P < 0.05$ ). High body mass index ( $P < 0.05$ ), severe fibrosis ( $P < 0.05$ ), shortened treatment duration from 48 to 24 weeks ( $P < 0.05$ ), anaemia and rash during treatment ( $P < 0.001$ ) were identified as predictors of hospitalisation and outpatient visits and as drivers of total costs. Univariate sensitivity analyses demonstrated that shortened treatment duration and lower occurrence of rash lead to large cost savings. **CONCLUSIONS:** This study identified both baseline and on-treatment antiviral therapy characteristics as drivers of MRU-related costs for HCV patients following antiviral therapy. The shortened treatment duration and reduction in adverse events due to simeprevir treatment lead to extra cost savings compared with PegIFN/R treatment. This suggests that there are potential patient management and cost-effectiveness implications associated with the choice of specific antiviral treatments.

#### PIN97

##### WHAT EXPLAINS WILLINGNESS TO PAY FOR AVOIDING MORBIDITY RISK DUE TO MALARIA? RESULTS FROM A GLOBAL META ANALYSIS

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**OBJECTIVES:** Willingness-to-pay (WTP) to avoid morbidity is a widely-used measure of disease valuation. This paper aims to meta-analyze variation in mean-WTP of avoiding morbidity due to malaria. Benefits from avoiding incidences can be approximated for use in cost-benefit analyses (CBA). This study is an improvement over an earlier meta-analysis: Double-counting is avoided (exclusion of same study results), new studies and explanatory variables are added (e. g. malaria incidence rates). More sophisticated regression techniques are employed to deal with issues, such as heteroscedasticity (e. g. multiple observations from a single study). Furthermore, other mosquito-borne diseases (filariasis, trypanosomiasis and encephalitis) are included to test between-disease valuation differences. **METHODS:** A systematic literature review was conducted, resulting in a database of 61 studies, yielding 200 data points. A meta-regression model was estimated. Dependent variable is mean-WTP per treatment per year in 2012 USD (Purchasing Power Parity and inflation adjusted). The explanatory variables consists of (i) treatment characteristics (service, private/public goods etc.), (ii) methodological characteristics (revealed vs. stated preference, WTP elicitation method, etc.), and (iii) sample characteristics (age, gender, exposure etc.). **RESULTS:** Standardized mean-WTP range is 0.3 USD and 9000 USD. Data is censored: over 70% of mean-WTP includes zero-values. Preliminary comparisons show that valuation of malaria avoidance is influenced positively for altruistic interventions and negatively for rural samples. The latter is correlated with income- underlining the vulnerability of poorer people (due to higher exposure). Additionally, we find significantly higher WTP to avoid filariasis over malaria. The meta-regression model explains over 30 percent of observed variation between WTP values. Predictive power is tested using a jackknife resampling procedure. **CONCLUSIONS:** The preliminary results provide policy-makers important information on benefits to malaria interventions, with a special focus on rural areas. From a methodological perspective, meta-regression helps to improve the practice of benefit transfer, and generate improved predictions for CBA.

#### INFECTION – Patient-Reported Outcomes & Patient Preference Studies

#### PIN98

##### PERSISTENCE TO TREATMENT OF CHRONIC HEPATITIS B VIRUS (HBV) INFECTION: A STUDY BASED ON THE FRENCH IMS LIFELINK TREATMENT DYNAMICS (LTD) DATABASE

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**OBJECTIVES:** To assess and compare the compliance with anti-HBV antiviral oral drugs. **METHODS:** A pharmaco-epidemiological study, based on the IMS LifeLink™ Treatment Dynamics (LTD) database was used to investigate the frequency and the regularity of patients' deliveries on retail pharmacies for 18 months follow-up period between June 2012 and November 2013. Incident patients with no anti-HBV drug deliveries within the last 3 months were included in the cohort. For the follow-up period, patients with no anti-HBV deliveries in a retail pharmacy within 3 consecutive months were considered having stopped their treatment which can lead to an overestimation due to the double dispensing system of these drugs in France. Study investigated patients' demographic characteristics, persistence rates, medication possession ratio (MPR) and proportion of days covered (PDC) according to initial molecule. **RESULTS:** 793 patients (median age 50 years old) initiated a treatment against HBV (patient with both anti-HBV and HIV treatments were excluded); for the follow-up period, 5% of patients switched HBV treatment; 32% of patients stopped their treatment for the follow-up period. Patients who continued their treatment are compliant as MPR is respectively of 160% and 103% at 6 and 12 months while PDC values are 82% and 78%. No differences stood out among the different treatments, especially between Tenofovir and Entecavir (the two often prescribed HBV drugs). Moreover older patients tend to be more compliant than the youngest one. **CONCLUSIONS:** By using the IMS Lifelink longitudinal database this study highlights the fact that one third of patients treated with anti-HBV treatment stopped it within 18 months while these drugs are well tolerated. Therefore physicians' challenge consists consequently in motivating patients to continue their treatment even they feel asymptomatic.

#### PIN99

##### HAND HYGIENE COMPLIANCE OR THE INFLUENCING FACTORS OF EFFICIENCY IN THE SCOPE OF STUDENTS

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**OBJECTIVES:** The prevalence of nosocomial infections is between 5-15%. Reduction of nosocomial infections, recognition in time and adequate treatment are all emphasised activities of patient security. The aim of this examination is to measure theoretical and practical knowledge of hand hygiene of nursing students in secondary education. **METHODS:** Cross-sectional qualitative and quantitative was made, with non-random, accidental samples in 2014 January with the participation of students in secondary nursing education (N=116) to whom the rules of sepsis, asepsis and antisepsis, and correct hand hygiene knowledge were taught according to the number of lessons in the curriculum. Self-made opened and closed questionnaires were applied, with a focus on the knowledge of hand hygiene. The technique and efficiency of hygienic hand disinfection was measured with an infrared lamp.  $\chi^2$ -test, t-test, ANOVA were performed as a statistical method besides 95% probability ( $p < 0.05$ ). Data analysis was performed with SPSS 20.0 programs. **RESULTS:** The concept of disinfection was known correctly by 78% of the students, the exact terminology of nosocomial infection was known by 44%. Only 42 students thought that hands have the highest relevance in the transfer if infections. The preconditions of proper hand hygiene were indicated correctly by 11%. Examination with infrared lamp showed that 4 students implemented hand disinfection perfectly. The most common missed areas were: the back of the hand, phalanges, nails, thumb. **CONCLUSIONS:** Significant reduction of nosocomial infections may and must be reached, to which accurate theoretical and practical education of the students is required, and the acquirement has to be monitored continuously and strictly.

#### PIN100

##### DEVELOPMENT OF A SURVEY TO QUANTIFY PARENTS' PRIORITIES FOR VACCINATING CHILDREN AGAINST ROTAVIRUS

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**OBJECTIVES:** To identify and understand the importance of reasons mothers of young children would choose to vaccinate their child (ren) against rotavirus and the impact of vaccine features on vaccine choice and uptake. **METHODS:** Women with children 5 years of age or younger participated in a focus group and semi-structured interview to: (1) identify reasons they would choose to vaccinate their children against rotavirus independent of the clinical features or cost of the vaccine and (2) identify the clinical vaccine features that would influence their decision to vaccinate their children. A survey instrument was developed to elicit the relative importance of the reasons for vaccination. The survey also included a discrete-choice experiment (DCE) to elicit parents' preferences for clinical features of hypothetical vaccines and likely uptake of vaccines with different clinical features and cost. The survey instrument was used in 15 in-depth, face-to-face interviews and the findings were used to refine the list of reasons and the clinical vaccine features. **RESULTS:** Study participants identified 7 reasons influencing vaccination decisions – work disruptions, child-care disruptions, unplanned expenses, disruptions to routine, concern about child's discomfort, concern about child's health in the future, concern about spreading illness – and 6 clinical vaccine features influencing vaccine choice and uptake – number of illnesses prevented, severity of the illnesses prevented, duration of illnesses prevented by vaccine, location of vaccination (home or health care location), mode of administration (oral or injection), and age at which protection begins. Cost was also a relevant attribute in these decisions. The reasons for vaccination vary with the severity of illness. **CONCLUSIONS:** Deciding to vaccinate a child against rotavirus is the result of a decision process that is influenced by both the impact of rotavirus on the family, the severity of illness, and the clinical characteristics of the vaccine itself.

#### PIN101

##### CONFIRMATION OF THE FACTOR STRUCTURE OF THE PROQOL-HIV QUESTIONNAIRE TO ASSESS HEALTH-RELATED QUALITY OF LIFE IN PLWHA

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**OBJECTIVES:** To identify a parsimonious factor structure for the 43-item PROQOL-HIV questionnaire as an easy-to-use instrument for measuring health-related quality of life in clinical studies. **METHODS:** Using a representative sample of 3,022 HIV-infected patients from the Vespa2 French national survey, HRQL was summarized using the 8-dimension PROQOL-HIV questionnaire. Exploratory Factor Analysis (FA) was used to isolate 4 correlated factors. Dimensionality and internal consistency were checked using parallel analysis and Cronbach's alpha. A confirmatory FA was applied on the international validation sample (N=791, 8 countries). Summated scale scores were compared to individual scores computed from FA and partial credit models. **RESULTS:** The four dimensions down to: physical health and symptoms (11 items,  $\alpha = 0.931$ ), health concerns and mental distress (10 items,  $\alpha = 0.908$ ), social and intimate relationships (7 items,  $\alpha = 0.898$ ), and treatment impact (10 items,  $\alpha = 0.936$ ). Four items exhibited PROMAX rotated loadings  $< 0.4$ , three of which were found to cross-load on two factors. This four-factor solution suggests acceptable fit to the international validation sample (RMSEA=0.082, 90% CI [0.079; 0.084]; NNFI=0.880). Correlations between unweighted sum scale scores and factor or IRT scores were above 0.9 in most cases. **CONCLUSIONS:** PROQOL-HIV is the only specific scale taking into account patient's experience with treatment. This simplified scoring version will allow researchers and clinicians to better