Duration was estimated from the number of treatment days per patient. Resource use (medications, physicians visits, referrals [excluding hospitalisations]) were retrieved from patients’ medical records. Economic analyses were performed to estimate the average direct cost of PHN management from the National Health Service (NHS) perspective. RESULTS: 25,002 patients with HZ were included in the analyses. Mean age was 67.9 years, 61.1% were females. One-month definition: 19.5% (95% CI 19.0%; 20.0%) of patients developed PHN, 65.4% were females; mean age was 71.2 years. Three-month definition: 13.7% (95% CI 13.2%; 14.1%) of patients developed PHN, 66.6% were females; mean age was 71.1 years. The mean PHN duration was 7.5 and 9.0 months using the 1 and 3-month definitions respectively. The mean direct cost of PHN management per episode was €284.38 and €340.04 for the NHS (1 and 3-months definitions) increasing with severity (mild: €166.62, moderate: €317.97, severe: €519.62 for the 1-month definition). CONCLUSION: This study confirms that PHN episodes remain frequent and costly sequelae of HZ. Therefore, the future implementation of a prophylactic Zoster vaccine is expected to significantly decrease the economic burden of PHN.

THE ECONOMIC BURDEN OF DRUGS FOR CHILDREN CARE IN GENERAL PRACTICE: AN OBSERVATIONAL STUDY IN FRANCE

Pelletier-Fleury N¹, Le Vaillant M², Rosman S¹, Franc C¹
1Cermes, Inserm U750 (National Institute of Health and Medical Research), Le Kremlin Bièvret, France. 2Cermes, Inserm U750 (National Institute of Health and Medical Research), Le Kremlin Bièvret, France, 1Cermes, Inserm U750 (National Institute of Health and Medical Research), Le Kremlin Bièvret, France.

In France, children represent about 15% of GPs’ consultations. The reasons for the doctor-child encounter have not yet been extensively studied, and no research gave insights into the economic burden of children care in general practice. OBJECTIVES: This study aimed to: 1/ provide a descriptive analysis of the main reasons for encounter, 2/ to examine the breakdown of the cost of drugs prescribed and 3/ to estimate the economic burden of drugs for children care in general practice in 2003 (the prevalence method was used). METHODS: We carried out an observational study in a representative sample of 922 French GPs (BK-L-Thalès® panel). We observed 60 consecutive visits per doctor and registered data concerning all the children’s visits during this period of time. Patients’ demographics, reasons for encounter and related treatments were collected directly during the consultation (patient management software). RESULTS: A total of 6652 consultations out of 50,848 (13.08%) concerned children (up to 15 years old). They were on average 6.8 ± 4.3 years old (29.2% were 3 or less), 52.1% were males, 11.1% of them consulted the GP for the first time, only 1.3% had a chronic illness. The main reasons for encounter were respiratory tract infections in 54.8% of cases, vaccination or routine exam and prevention in 13.6%, abdominal complaint in 4.3% and dermatosis in 4.1%. The top 3 of the cost of drugs prescribed was: antibiotics with 21.7% of the costs (€12,652 in the sample), local treatment for URTI with 19.9% (€11,575) and vaccines with 11.8% (€6898). The economic burden of drugs for children care in general practice was estimated at €179.6 million for the year 2003. CONCLUSION: We identified an area of high expenditure where inefficiencies may exist and saving be made; this remains to be explored.

EXPENDITURES ON PHARMACEUTICALS: DEMOGRAPHIC CHANGE AND INNOVATION—AN EMPIRICAL ANALYSIS

Ilgin Y, Eisen R
Johann Wolfgang Goethe University, Frankfurt, Germany

OBJECTIVES: Several studies forecasting health care expenditures (HCE) predict continuously increasing expenses due to at least three factors: ageing, technical progress, and prices. The aim of this study is to identify the effects of selected influencing factors on the expenditures of prescribed drugs (EPD), e.g. the share of 65 aged and older (POP65), doctors’ consultations (DOC), and R&D expenditures of pharmaceutical industry (PHARM_R&D). As EPD have grown faster than any other major components of HCE since the late 1990s, cross-national differences in pharmaceutical expenditures are of great interest. METHODS: With panel data of seven countries (Australia, Canada, Finland, France, Germany, Japan, and US) from 1991 to 2001 a dynamic panel estimator, namely the first-differenced General Method of Moments (GMM) has been applied to test the following hypotheses. If POP65 as well as DOC, and PHARM_R&D increase, then EPD will increase. If the rest life expectancy at age 65 (LIFEXP65) as well as PHARM_R&D increase, then innovations instrumented as patent applications (PAT_AP) will increase. RESULTS: The one-period lagged EPD (0.646; 99%CI) was highly significant, POP65 (0.018; 90%CI) and DOC (−0.024; 95%CI) were significant, and PHARM_R&D was marginally significant.

SERVICE UTILIZATION AND HEALTH CARE COSTS OF THE ELDERLY POPULATION IN GERMANY

Heinrich S, Lappa M, Angermeyer MC, Riedel-Heller SG, Koenig HH
University of Leipzig, Leipzig, Saxony, Germany

OBJECTIVES: Due to future demographic change health policy has to focus on elderly people. The aim of this study was to measure service utilization and direct health care costs and its predictors for the age group 75+ in Germany from the societal perspective. METHODS: A bottom-up costing study was conducted using a representative cross-sectional population sample. Study subjects (N=452) were recruited through 20 general practitioners in Saxony. The main instrument was a questionnaire of service utilization and costs administered by an interviewer. The Chronic-Disease-Score (CDS) was calculated based on reported drug utilization. Predictors were derived by multivariate regression models. RESULTS: Study subjects caused average direct health care costs of EUR 3868 in 2004. This included: inpatient treatment 36%, pharmaceuticals 28%, outpatient services 14%, home care 9%, medical supply and dentures 6%, nonphysician providers 4%, assisted living 1% und transport 2%. Female gender, a higher level of vocational training and a higher CDS have to focus on elderly people. The aim of this study was to identify the effects of selected influencing factors on the expenditures of prescribed drugs (EPD), e.g. the share of 65 aged and older (POP65), doctors’ consultations (DOC), and R&D expenditures of pharmaceutical industry (PHARM_R&D). As EPD have grown faster than any other major components of HCE since the late 1990s, cross-national differences in pharmaceutical expenditures are of great interest. METHODS: With panel data of seven countries (Australia, Canada, Finland, France, Germany, Japan, and US) from 1991 to 2001 a dynamic panel estimator, namely the first-differenced General Method of Moments (GMM) has been applied to test the following hypotheses. If POP65 as well as DOC, and PHARM_R&D increase, then EPD will increase. If the rest life expectancy at age 65 (LIFEXP65) as well as PHARM_R&D increase, then innovations instrumented as patent applications (PAT_AP) will increase. RESULTS: The one-period lagged EPD (0.646; 99%CI) was highly significant, POP65 (0.018; 90%CI) and DOC (−0.024; 95%CI) were significant, and PHARM_R&D was marginally significant.
(0.018; 90% CI). The one- and two-period lagged PAT_AP (0.451 & 0.297; 99% CI) and LIFEXP65 (0.018; 99% CI) were highly significant and PHARM_R&D (0.166; 90% CI) was marginally significant. CONCLUSIONS: In contrast to effects in HCE in previous studies there is an ageing effect (pull factor) causing rising EPD as well as for pharmaceutical innovations. Additionally, we found a push factor, namely R&D expenditures of pharmaceutical industry causing increasing EPD and innovations. Increasing doctors’ consultations lead to decreasing EPD maybe caused by successful application of lower medical therapies or by additional following non-medical therapies which are not affecting EPD.

THE DETERMINANTS OF DRUGS PRESCRIPTION FOR CHILDREN IN GENERAL PRACTICE
Franc C1, Le Vaillant M2, Rosman S1, Pelletier-Fleury N1
1Cermes, Inserm U 750 (National Institute of Health and Medical Research), Le Kremlin Bicêtre, France, 2Cermes, Inserm U750 (National Institute of Health and Medical Research), Le Kremlin Bicêtre, France
In France, 97% of children under age of 3 turn to a GP at least once a year. The GP/child encounter benefits from a particular status -no gate keeper constraint, baby extra fee- even if neither the nature nor the economic burden of this activity have been yet studied. OBJECTIVES: This study aimed to: 1/ analyse the nature of the activity for children in General Practice 2/ find out the determinants of the prescription decision. METHOD: We got data from a representative sample of 922 French GPs (BKL-Thalès panel). Information was directly collected on the basis of 60 consecutives visits per GP, through a patient management software. We only picked children visits. In addition to standard GPs and patients characteristics, other data were also collected on the child: health insurance status, status in the GP's practice: regular / i new and on the visit (length, reasons for encounter, prescription of drugs...). We use the Hierarchical Linear Models to identify the determinants of the prescription at the respective level of children and GPs. RESULTS: Activity is highly concentrated: Upper Respiratory Tract Infections represent approximately 640,000 inhabitants. As the drug expences

DETECTION OF SEMANTIC AMBIGUITY IN THE ITALIAN CHILD-FRIENDLY EQ-5D VERSION
Tomasetto C1, Matteucci MC1, Selleri P1, Cavinii G2, Pacelli B1, Mattivi A1, Broccoli S1, Scalone L1
1University of Bologna, Bologna, Italy, 2University of Bologna, Bologna, Italy, 3Health Authority of Bologna, Bologna, Italy, 4Centre of Pharmacoeconomics, University of Milan, Milan, Italy
A very difficult objective to be reached in the field of outcome research is to measure Quality of Life (QoL) in paediatric populations. Non negligible semantic ambiguity has been shown to characterize health perceptions and descriptions in developmental age. OBJECTIVE: As a part of the project aimed at developing a valid and reliable Italian version of EQ-5D suitable for children—i.e. the Italian Child-Friendly EQ-5D (CF-EQ-5D) project—statistically based lexical analyses are applied. The aim of the analyses is to identify the semantic field associated to each item of the instrument, with the final purpose of formulating comprehensible, valid, unambiguous, and reliable items in Italian CF-EQ-5D. METHODS: Thirty children/adolescents (aged 8–15 years, all native speakers, resident in different parts of Italy), gave their informed consent and self-completed an Italian version of CF-EQ-5D (from a forward-backward-forward translation method). Then participants were submitted to face-to-face and tape-recorded cognitive interviews and were invited to generate word associations in response to the core words of each item. RESULTS: The resulting textual corpus (normalized and lexicalized) is submitted to descriptive and multivariate statistical analyses fit for textual data. An analysis of lexical specificity is calculated in order to illustrate the general features of the vocabulary generated by respondents. In a second step, Multiple Correspondence Analysis is performed on a words*contexts matrix, with socio-demographic characteristics of the participants as illustrative variables. CONCLUSIONS: Preliminary outcomes suggest that children and adolescents associate non-univocal semantic fields to core aspects of the health-related lexicon. Implications for the developing and improving of the Italian