cines in the public offer. Here, we analysed the impact of these new medicines financed by the Spanish NHS over the period 1996–2003, as a continuation of a previous one. METHODS: A retrospective analysis has been made, selecting new medicines. These have been classified following the degree of therapeutic innovation at the moment of authorisation, according to two criteria, the Ministry of Health and Consume (MHC) and the Drug Information Centre of Andalusia Autonomous Community, (CADIME). Consume data were provided by the MHC database and was expressed as Price for sale Direct to Customer, tax-free (PDC), by means of millions of Euro (M€). The rapid introduction of new medicines into the clinical practice (next to one-hundred top) and the evolution of the consumption were the indicators used. RESULTS: The total number of new drugs marketed during the period of the study was 113. From these, 20 are next to one-hundred top in the first year after authorisation. None of them were categorized as “an exceptional therapeutic novelty”. Most were drugs with “non o very small therapeutic improvement” or “insufficient clinical evidence” according to the MHC and CADIME classification, respectively. Different status of classification was found in more than six of the 20 new drugs. When analysing new drug consumption, it detected that their quote is superior to 1.9%, in average, in relation to the public annual consumption. CONCLUSIONS: The market size, devoted to recently introduced medicines with high prices, is important. This is not in agreement with their limited therapeutic innovation, being even least when CADIME classification is considered. Nevertheless, a notable decrease in the number of “innovator” drugs introduced from the year 2001 was observed.

**PHP25**

**WILLINGNESS TO PAY VERSUS OUT OF POCKET PAYMENTS FOR HEALTH SERVICES UTILIZATION IN GREECE**

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OBJECTIVES: To compare willingness to pay (WTP) with out of pocket (OoP) payments of the Greek population for primary and secondary health services utilization. METHODS: A telephone survey was conducted in 2003, covering a national random sample of 1000 participants questioned regarding their additional WTP and OoP actual payments, for a 12 month period, in order to improve their provision of health services in terms of NHS responsiveness and access to health care. RESULTS: A total of 95.6% respondents were compulsory insured, 55.8% of WTP respondents were male, 53.8% of non WTP female. Mean age of WTP respondents was 42.1 years. A total of 63% urban residents, 13% semi-urban and 23.8% rural. Twenty percent (20%) of those who declared WTP had an income per month from 900 to 1500€, 14.7% from 501 to 900€, 20% from 1501 to 3000€ and the rest (37.8%) had an income over 3001€. Of those who denied WTP, only 16.4% had spent nothing as OoP payments for health services utilization during the last year, 46.3% spent up to 150€, 14.2% spent from 151 to 300€, 8% from 301 to 600€, 6.4% from 600 to 1500€ and 2.5% over 1501€. According to the WTP amount already declared, 62.8% of those willing to pay from 0 to 50€ had actually spent approximately a total of 150€ for health services utilization during the last 12 months, while 100% of those willing to pay from 601 to 900€ had only spent up 150€. CONCLUSIONS: A total of 70.8% of respondents declared non WTP for improving their access and utilization of primary and hospital care. Among the respondents who denied WTP, 83.6% declared OoP actual payments starting from 150 to 1500€ per year. Our findings may reflect the difference between revealed and stated populations’ preferences.

**PHP26**

**PHYSICIANS’ ACTIVITY HETEROGENEITY: AN EMPIRICAL STUDY IN TWO FRENCH REGIONS**

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OBJECTIVES: The objective of the study was to identify different GP’s practicing profiles, in order to better understand the way French GP’s react to governmental measures to contain cost or to increase quality of care. METHODS: We constructed a large database about of 4700 GP’s from 2 French regions (Aquitaine and Burgundy) for the year 2000. Variables described physicians’ volume and structure of medical activity (office consultations, home visits, medical procedures, prescriptions of pharmaceutical, lab tests and X-rays examinations), income level, personal characteristics (age, gender, specialty, localisation, contractual status with health insurance), practice characteristics (size, structure by age, percentage of hospitalised patients, etc.) and socio-economic characteristics of the geographical environment (physicians density, distance to the nearest hospital, unemployment rate, urban or rural town). The database was analysed although a variety of statistical methods including cluster analysis and econometric tests. RESULTS: Four different homogeneous groups were identified, each of them relating physicians’ level of activity to their socio-economic status. In group 1 for instance, GP’s have a high level of activity (2340 patients and 9300 consultations in average), 46% of them practice in rural areas and only 4% are women. Conversely, physicians in group 4 have a low level of activity (1050 patients, 2400 consultations in average), 75% are located in urban areas and 44% are women. Econometric tests allow discriminating the main determinants of multidimensional medical activity between rural and urban GP’s. CONCLUSIONS: The way GP’s exert medicine is not uniform. The level and the type of medical activity greatly vary among physicians. Individual factors as well as characteristics of the socio-economic environment greatly explain these differences. An immediate consequence is that any cost-containment measure which applies uniformly to all GP’s, such as regulating fees, necessarily results in different outcomes according to the type of physicians’ category.

**PHP27**

**AGE AND GENDER DISTRIBUTION OF PHARMACEUTICAL EXPENDITURE PER INHABITANT**

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OBJECTIVES: To highlight the importance in establishing age and gender bands with the aim of explaining the level of pharmaceutical expenditure of each Primary Health Care Team (PHCT). METHODS: Thanks to the advances of information systems and the introduction of the Personal Health Card, it has been possible to calculate the cost per inhabitant (according to age and gender) taking into account the expense generated through prescriptions produced by inhabitants assigned to the Public Health System (Central Register of Insured). RESULTS: According to some established criteria, 20 bands have been determined. It is proved that 10% of the population is concentrated in the 67–77 year old band and the expenditure that it generates is 33% of the total expense. However, the 9–12 year old and 33–39 year old bands together (15% of the population) only represent 3.8% of the total expense. Gender is also a relevant variable. Women have a higher level of expense than men for ages comprised between 21 and 72 and for those above 89.
years old. There are alternations in the maximum values for gender in the 0 to 20 years old band. CONCLUSIONS: This study reflects the need to determine an optimum number of bands; that is, to add the information in some specific intervals that allow us to carry out an efficient analysis without losing the necessary perspective in order to obtain related conclusions with the aim of the study. It proves that a previous analysis is essential to evaluate the behaviour of the cost per inhabitant of a PHCT.

**PHP28**

**THE ORGANIZED REGISTER OF CANADIAN HEALTH INFORMATION DATABASES (ORCHID) PROJECT:**

A RESEARCHER INTERFACE

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OBJECTIVES: To organize and classify existing Canadian health information databases into a searchable repository that will assist in identifying and assessing Canadian data available for health outcomes and related research. METHODS: The identification of Canadian health information databases began with a structured search strategy involving Medline (PubMed, OVID); Internet search engines; web sites of a number of organizations, universities and government bodies; and personal communications. Canadian databases with data from the year 2000 and onwards were included. Databases were assigned to one of four basic types (Administrative, Registry, Surveillance and Survey) and further classified in a hierarchical structure using categories, sub-categories and low-level terms. The three high-level categories were Medical Condition (MC), Population Health (PH) and Health Services Utilization (HSU). Approximately 20% of the identified databases were further profiled in detail, with recording of information on an additional 20 variable fields including sample size, data collection methods and data quality. RESULTS: The creation of a classification structure fully characterized the breadth and scope of the 255 unique databases initially identified. By database type, the largest proportion of databases was classified as survey (34%; n = 87), followed by administrative (28%; n = 72), registry (22%; n = 56) and finally surveillance (16%; n = 40). By non-exclusive database category, most were classified as PH (n = 140), followed by HSU (n = 116) and finally MC (n = 114). Canadian health databases were found to provide information across a wide range of clinical conditions, particularly those related to high disease burden areas. In addition, they provided health utilization and determinant data. Some data gaps were recognized, such as environmental exposure data, data identifying specific subpopulations, and information needed to fully assess data quality. CONCLUSIONS: Classifying existing Canadian health information databases within a single, organized register is expected to provide an effective research tool in the planning of health outcomes and related research.

**PHP29**

**PATHOLOGY RELATED DIFFERENCES IN VARIANCE OF DRUG INSURANCE COST IN HOSPITAL STAYS: FEASIBILITY OF FIXED FUNDING IN PATHOLOGIES WITH REDUCED COST VARIANCE**

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OBJECTIVES: Parameters of central tendency (mean) are often estimated in budget impact assessment (BIA) with less emphasis on parameters of spread (variance); critical to fixed funding (FF) policies (e.g. envelope systems) is accuracy of the estimate and maximal precision. The complexity and diversity of the hospital pathology mix and its treatment are the main theoretical hurdles encountered. In this analysis, the variance of the drug treatment reimbursement cost was investigated on the Main Diagnostic Code (MDC) and the All Patients Refined Diagnosis Related Groups (APRDRG)-level. The aim was to select low cost variance diagnoses which would enhance precision in FF. METHODS: Belgian hospitals register admission data in minimum basic data sets (MBDS): we extracted anonymous data from stays of 21 peripheral Flemish hospitals (during 2002). MBDS contains ICD-9-CM codes, performed procedures, stay parameters (e.g. risk of mortality), patient characteristics (age, gender) and drug utilization data with the national insurance cost. Data were analyzed in SPSSWIN® 12.0. RESULTS: The database contained 368,618 unique stays. On MDC-level, the fit between mean cost and variance was merely a non-linear relationship; the MDC’s cardio-vascular (CV) disease, myeloproliferation & neoplasms, infectious disease and liver disease exhibited a linear relationship with r² > 0.90; in these MDC’s low mean cost pathologies also allow fixed funding. On APRDRG-level, increased cost variance probably reflects increased drug utilisation variability and/or heterogeneity in drug pricing. Illustrative examples: the ratio of mean cost for cesarean (95€) to vaginal (27€) delivery is about 4 but the ratio of variances exceeds 10. In the CV area, the corresponding ratios for heart failure (269€) to angina (104€) are respectively 2.5 and 8. CONCLUSIONS: Reducing mean cost is important to BIA but to FF reducing cost variance is essential in order for the funding to be in line with the resources used.

**PHP30**

**2006 DRUG PAYMENTS IN THE HOSPITAL OUTPATIENT PROSPECTIVE PAYMENT SYSTEM: REIMBURSEMENT IMPLICATIONS**

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OBJECTIVES: The Medicare Prescription Drug, Improvement and Modernization Act (MMA) of 2003 requires the General Accounting Office (GAO) to conduct surveys in 2004 and 2005 to determine the hospital acquisition cost for specified outpatient drugs. The Centers for Medicare and Medicaid Services (CMS) will use the survey data to set hospital outpatient drug payment rates for 2006. This study explores the potential impact of poor study design on 2006 hospital outpatient prospective payment system (OPPS) drug payments. METHODS: Various methods of recording acquisition cost were collected from hospital systems and categorized. Past CMS and GAO discussions of acquisition cost were identified and accumulated in an indexed database. Findings from the hospital sources and the governmental sources were compared and underlying assumptions examined with a view toward predicting the GAO approach to determining hospital drug acquisition cost. RESULTS: The hospital survey revealed significant variation in how acquisition cost is defined and recorded in hospital pharmacies. The most common method reported was a percentage of average wholesale price (AWP). The next most common method reported was actual acquisition cost at a certain point in time, updated quarterly. Constantly updated acquisition cost was rare, due to the required information technology. When entries in the indexed database of CMS and GAO discussions of acquisition cost were compared to the hospital