**PHP100**

**CORRELATION BETWEEN HOSPITALIZED MORBIDITY AND COST OF TREATMENT OF SELECTED CHRONIC DISEASES**

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**OBJECTIVES:** In 2011 the budget of the public payer in Poland, National Health Fund (NHF) amounted to 58.2 bln PLN. 47.3% of these funds was allocated to fund hospital treatment which is based on diagnosis-related groups (DRGs) but also includes innovative, expensive drugs (i. a. chemotherapy, orphan). The aim of the paper was to identify the existing correlation between hospital morbidity and the average unit cost of hospital treatment in various chronic diseases. Comparison of individual hospital costs of treatment different chronic diseases with varying degrees of severity, different course and level of incidence (from common to ultrarare) open the possibility of presenting the correlation between morbidity and unitary medical costs incurred by the NHF for the treatment of various indications. **METHODS:** The analysis was prepared for 23 therapeutic areas, which were divided into 4 categories (diseases: common, infectious, pediatric and rare /ultrarare), diversified both in terms of severity and morbidity. This choice gave a possibility of comparing a wide range of chronic diseases, which have a significant impact on quality of life and mortality. The analyzed material included hospital procedures and services indicated by the NHF in 2011. **RESULTS:** Using the Pearson's linear Correlation test, dependence between variables (the average cost of hospitalization and the number of patients) for 23 therapeutic areas was assessed. The results showed that the lower prevalence (fewer patients with the diagnosis) is connected with the higher average unit cost of treatment. **CONCLUSIONS:** In Poland, among all studied diseases the most expensive was the individual treatment of patients diagnosed with ultrarare diseases (i. a. Lysosomal storage diseases). Chronic ischemic heart disease, hypertension and diabetes mellitus were associated with the largest number of annual hospitalizations and globally were the most cost-intensive for NHF. At the same time hypertension is associated with the lowest average unit cost of hospitalization among all studied diseases.

**PHP101**

**PATIENT REPORTED OUTCOMES AND THEIR RELEVANCE IN REIMBURSEMENT DECISIONS**

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**OBJECTIVES:** Payers all need evidence of clinical effectiveness, reasonable cost, and safety. Although, patient-reported outcomes (PROs) are an important component of this evidence it is not always clear which PROs to use and reliance on an incorrect PRO can have negative consequences. The objective was to describe the factors determining which PROs are most likely to meet payer evidence needs. **METHODS:** A structured discussion of factors influencing PRO choice was held between experts in late phase studies, evidence review, and economic modelling. These were then validated against a sample of published reimbursement decisions across multiple disease areas. **RESULTS:** Focus of most questions is on whether to use a generic, disease-specific or novel measure. Disease specific PROs are very frequently of value in demonstrating clinical effectiveness and may be the standard clinical outcome. For example, migraine studies include pain assessment and headache frequency. To facilitate Payers' decision making generic PROs such as EQ-5D and SF-36 are commonly used for assessing quality of life (QoL). However these instruments may not be reliable in disease areas characterised by focal impacts on patient wellbeing. For example, pain is only a small component of the SF-36 consequently changes in pain levels cannot be measured with great precision and the extreme effects of pain may be missed when generating estimates of utility. **CONCLUSIONS:** When choosing a PRO, it is important to consider the disease, treatment and payer reimbursement decision context. Disease specific QoL measures may be more sensitive than a generic tool but may also need mapping to a general QoL measure. Acceptance will be contingent on the existence of robust evidence either from published literature or additionally collected data. Reviews of previous HTA submissions and payer decisions help identify requirements / standard practices in key markets and identify common criticisms or problems.

**PHP102**

**INTERVENTIONS AND POLICY MEASURES IN HEALTH CARE AND PHARMACEUTICAL SECTOR TO INCREASE EFFECIENCY AND RECOVERY OF GREEK HEALTH CARE SYSTEM**

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**OBJECTIVES:** Greece is under a very tough and strict memorandum enforced by the European Union that has designed and applied austerity measures in order to save Greek economy and minimizes its public debt. Also the Greek Heath care system should be improved, upgraded or redesigned from scratch in order to be more flexible and more efficient. The legislative intervention made by the European Union and the memorandum in Greek Heath Care system and the Pharmaceutical market constituted legislative framework for the Greek Heath Care and the Pharmaceutical sector. **METHODS:** Data on total pharmaceutical expenditures from 2009-2011, some of them until 2012 were obtained from Hellenic Association of Pharmaceutical Companies. They were analyzed using basic statistical methods of observing. **RESULTS:** In nearly all observed parameters was recorded their lowering. Total pharmaceutical expenditures per capita $\Delta x_{2009\text{-}2011}$= -20%, $x_{2011}$=5.073 mil €, pharmaceutical expenditure as% of health expenditure $\Delta x_{2009\text{-}2011}$= -6,5%, $x_{2011}$=24,1%, pharmaceutical expenditure as % of GDP $\Delta x_{2009\text{-}2011}$= -11,1%, $x_{2011}$= 2,4%, private pharmaceutical expenditure $\Delta x_{2009\text{-}2011}$= -13%, $x_{2011}$= 1.094 mil €, private pharmaceutical expenditure per capita $\Delta x_{2009\text{-}2011}$= -13,5%, $x_{2011}$= 96 €, public pharmaceutical expenditure $\Delta x_{2009\text{-}2012}$= -36,8%, $x_{2012}$=3.215 €, public pharmaceutical expenditure per capita $\Delta x_{2009\text{-}2012}$= -37,6%, $x_{2012}$=282 €, rebate from pharmaceutical companies $\Delta x_{2009\text{-}2012}$= +364,1%, net public pharmaceutical expenditure $\Delta x_{2009\text{-}2012}$= -42,3%, $x_{2012}$=2.88 mil €, net public pharmaceutical expenditure per capita $\Delta x_{2009\text{-}2012}$= -43% $x_{2012}$ = 253 €, net public pharmaceutical expenditure as % of GDP $\Delta x_{2009\text{-}2012\_}$ -36,3% and in 2012 they constituted 1,4% GDP. Price changes of medicines $\Delta x_{2005\text{-}2011}$= -17,8%, $\Delta x_{2010\text{-}2011}$= -10,7%. **CONCLUSIONS:** Interventions implemented in 2010 had according presented parameters a great impact on effectiveness of Health care and Pharmaceutical sector and this improvement will continue for a few years more. The betterment of Health care and Pharmaceutical sector might help to lower the public debt and recover economic credibility of Greece.

**PHP103**

**DETERMINANTS OF HOSPITALS' ATTRACTIVENESS FOR PATIENTS: APPLICATION TO EXPENSIVE DRUGS**

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**OBJECTIVES:** Hopital's attractiveness can impact the number of inpatients, and so health care expenditures. The objective is to identify parameters related to patients or drugs, wich influence the proportion of inpatients not residing in the hospital's region, in order to better understand expensive drug expenditures. **METHODS:** A database on expensive inpatient drugs listed on a national formulary was set up, with information related to drugs -from National and European Health authorities- and patients -from our university hospital centre's database (UHC) of the Paris region. A censored regression model, Tobit model, was developed in which the dependent variable was, for each drug, the ratio of the number of inpatients not residing in the Paris region, on the total number of inpatients receiving this drug. Explanatory variables were related to drugs and to patients. All statistical tests were run in Stata/IC13®. **RESULTS:** During 2012, 526 091 doses -of the 113 drugs list- are administered to 30 499 UHC inpatients. 13% of inpatients come from off the Paris region. According to the Tobit model, three variables positively impact the ratio (innovative status, percentage of women and Diagnosis Related Group coded as severe) and three negatively (orphan designation, percentage of patients over 65 years old, biological origin). Therapeutic classes and Major Diagnostic Categories also impact significantly the ratio according to the statistic class. For instance, innovative status, defined by a market authorization granted in the five last years and a high level of improvement in actual benefit, improves the ratio of 8.6 points. To benefit from the most innovative treatments, patients tend to be cared in UHC's hospitals. **CONCLUSIONS:** This study represents the first step of modelling significant determinants of hospital's attractiveness for patients. It focuses, quite uniquely, on patients and drugs factors, and could be extended to other variables.

**PHP104**

**ECONOMIC IMPACT OF CLINICAL RESEARCHES TO THE RESEARCH CENTERS AND REIMBURSEMENT SYSTEMS IN TURKEY**

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**OBJECTIVES:** Clinical researches are an important tool for the improvement of medicine and significant economic value. The aim of this study was to investigate the economic impact of clinical researches to the research centers and reimbursement system in Turkey. **METHODS:** Budget of clinical trials were calculated from the raw data of the Report of Istanbul Medical Faculty Clinical Researches (ITFKAR) between years 2006-2010. In addition, the possible cost of the drugs that were used in the clinical researches for SGK was calculated for showing the cost of medicines acquired with clinical researches. It has been accepted that predicted budgets of reviewed files were spent for research. Similarly, it has been accepted that the number of patients was not changed during the studies. Thus, approved budgets could be accepted as drug investment of the approval year. For the calculation of drug costs, discounted reimbursement figures of Social Security Administration (SGK) for licenced products were used. If not licenced and imported via Turkish Chamber of Pharmacists, the prices of abroad drug list of SGK were used. Calculations were performed with the drug prices for the year 2013. **RESULTS:** The average of drug cost savings per patient with participation to the clinical research and clinical research investment per patient were calculated as US$ 21.649 and US$ 4.879. It could be said that total budget of sponsored pharmaceutical researches was US$107 million and the government had a saving close to US$ 311.096.130 due to not reimbursing the cost of drugs of the patients who were included to the clinical researches in Turkey depending on the analysis. **CONCLUSIONS:** However study is based on assumptions, the findings are unique for the literature. The health policy makers can take account the study of the policy improvements about clinical trials in Turkey.

**PHP105**

**PHARMACEUTICAL DEVELOPPEMENT: AFRICA AN EMERGENT MARKET**

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**OBJECTIVES:** With population of more than 1 Billion, Africa is the world's second largest continent. The transition that African countries are undergoing is a real challenge for health care authorities. 24% of the global disease burden is accounted in Africa. The diseases that prevailed in the 60s and 70s have not completely disappeared, tuberculosis is still endemic as well as transmissible diseases like HIV/AIDS and Hepatitis still remained as a major problem while some others, such as cancers, cardiovascular and metabolic disorders are dramatically increasing, requiring the implementation of effective health care programs and leading to an increasing demand for drugs treatment. **METHODS:** Inventory of the potential of Africa in clinical research. **RESULTS:** In 2012, African Pharmaceutical market revenue was USD 18 Billion and expected to reach USD 30 Billion by 2016. Established countries in both Sub-Saharan and North African countries (South Africa, Nigeria, Cote d'Ivoire,