planning specific interventions and for evaluating patterns of pharmaceutical and hospital use.

**PHP33**

**USE OF PHARMACOECONOMICS FOR CREATION OF THE STATE FORMULARY IN UKRAINE**

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**OBJECTIVES:** In Ukraine forms insurance medicine and formulary system. Annually state select more than 3% from a gross national product. The limited tool on pharmaceuticals is insufficient. METHODS: We in the commission of Health Ministry of Ukraine have developed regulations about the National list of the essential medicines with use the pharmacoeconomic analysis for carrying out of the state purchases. The analysis “cost-minimization” dominates, the analysis “cost-effectiveness” will carry out seldom in connection with complexity of searching of the data about effectiveness of drugs. We have developed techniques the pharmacoeconomic analysis for creation of the formulary. RESULTS: We have created «The Program of pharmacoeconomical evaluation of drugs in Ukraine», which includes the education of the pharmacists on pharmacoeconomics and organization of pharmacoeconomical researches. We have developed recommendations on the pharmacoeconomic analysis for carrying out in Ukraine in view of its economic, demographic features. At the present stage in Ukraine the State formulary of medicines is developed. The government is hesitant to apply pharmacoeconomics widely in pricing and reimbursement. There is a system of gathering of pharmacoepidemiological data. Little experience exists in quality of life, measurement and cost-utility techniques. On the basis of materials of ISPOR we prepare the textbook “Pharmacoeconomics” by Ukraininan. More than 4000 practical pharmacists are acquainted with pharmacoepidemiological analysis. The original educational program on pharmacoeconomics for the clinical pharmacists is created. CONCLUSIONS: The pharmacoeconomics is necessary for creation of the insurance medicine and State Formulary in Ukraine. The education of the doctors and pharmacists on pharmacoeconomics is necessary for improving quality spent researches. Creation of the state formulary of medicines after results the pharmacoeconomical analysis will allow to improve medicinal provision of the population of Ukraine.

**PHP34**

**EFFECTS OF MEDICAL SAVINGS ACCOUNTS ON HEALTH CARE UTILIZATION AND HEALTH EXPENDITURE: EVIDENCE FROM CHINA**

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**OBJECTIVES:** To evaluate the effects of Medical Savings Accounts (MSAs), a health care financing method, on the health care utilization and health expenditure of the insured employees in China. METHODS: We use a before and after design. A multivariate econometric model was used to analyse the effects of MSAs reform on the changes in health care utilization and health expenditure, while controlling the effects of all other confounding factors. The use of health care and health expenditure was modeled in a two-step process: whether or not to seek health care; and how much to use health care and the resulting expenditure, giving that health care was to be used. The data are from a series of annual surveys at the individual level conducted in a Chinese city during 1993 to 1999. RESULTS: The use of MSAs in the Chinese city is associated with the shift of health care utilization from inpatient and emergency settings to outpatient settings. It is also associated with reduced use of high-tech diagnostic services. But overall health care utilization level and health expenditure continued to increase after the MSAs reform. CONCLUSIONS: The use of MSAs in the Chinese city resulted in the reduction of inpatient care and emergency care but failed to reduce the overall health care utilization and health expenditure per insured patient. The results suggest that MSAs may have more income effects than substitution effects on health care utilization and expenditure.

**PHP35**

**AGE AND GENDER IN PHARMACEUTICAL EXPENDITURE: A TOOL FOR RISK CALCULATION**

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**OBJECTIVES:** To highlight the importance of considering both age and gender of users (population (pop) with any prescription) if analyzing pharmaceutical expenditure. METHODS: All primary health care prescriptions (2003) have been considered (95 million prescriptions; 4.2 million users; 1237 million €). Indicators analyzed: prescriptions per user (P/U), cost per prescription (C/P) and cost per user (C/U), all from administration viewpoint. Risk of consuming (U/Pop) has been also calculated according to age and gender. RESULTS: Global: C/U: €291.9, P/U: 22.4, C/P: €13.0. Men present prescriptions more expensive (+€1.5), but women are more expensive (€305.6 vs. €275.4) because on average they demand 4.8 prescriptions more than men P/U grows exponentially (R^2 = 0.929) until 89 y.o. (63.4). Min: 4.3(10 y.o.). C/P varies considerably until 28 y.o. (avg: €10.0; Pearson v.c.:32.1). Prescriptions of growth hormone increase the C/P a 83% among 12–16 y.o. Since 29 y.o. C/P stabilizes (avg: €12.9; Pearson v.c.:8.6) presenting an upward trend at ages close to retirement age (chronic illnesses and copayment). C/U behaves exponentially until 88 y.o. (R^2 = 0.962). At 88 y.o. C/U is 3 times higher than global average and 28.5 higher than at 5 y.o. Since 17 y.o., women consume more medicines than men, but men present prescriptions more expensive than women so there are alternations in C/U. U/Pop at 70 y.o. is 1.84 times higher than at 30 y.o. (prob.0.90 vs. 0.49), and the difference in C/U is €569. For equal ages, there are also differences in U/Pop between primary health care teams (PHCTs) because of, for example, other socio-economic and geographical variables. CONCLUSIONS: It’s important to include age and gender of users in comparative analysis between PHCTs in order to consider differences in the population pyramid and in utilization levels. Benchmarking activity between PHCTs is being carried out monthly with these three standardized indicators. These reports allow to locate inefficiency with more accuracy and to apply measures more effective.