

The EMLs are collected and compared from 31 provinces; the indicators of EDP are evaluated before and after implementation. **RESULTS:** Although national EDL only contains 307 essential medicines, the number of added EMs in provincial EDL are various from 64 through 455. The zero-markup policy of EDs conducted in public grass-roots health facilities (urban community health centers and rural township hospitals) have reached to 98.8%. More than 95% EDs can be reimbursement by medical insurance schemes. The average percentage of price cutting was 25%–50% after tender bidding and purchasing. Quality assurance and sufficient provision of ED became a problem. The number of essential medicines is still not meet the needs of outpatients so that patients flow back to the secondary and tertiary hospitals, the financial subsidies from government usually are not supported timely. Along with the expansion of EDP in village health posts and hospitals, how to incentive and maintain the income level of health professionals have to be considered. **CONCLUSIONS:** To promote the EMP, the adjustment of EDL is required in 2012. The criteria of selection on essential medicines in provincial level should be unified. The implementation of EMP will not be successful in village and urban hospital level until solving the problem of remuneration and payment system in health settings.

#### PHP15

##### COMPARISON OF HEALTH EXPENDITURES AND DRUG EXPENDITURES IN TWO WESTERN BALKAN COUNTRIES

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**OBJECTIVES:** To compare health expenditure as total % of GDP, per capita PPP and in US dollars as well as total drug expenditure with top ten ATC groups with highest expenditure in 2009 and 2010 in Bosnia & Herzegovina (B&H) and Croatia (CRO). **METHODS:** Research was based on data published in latest official annual reports from two national Drug Agencies, from B&H and CRO, and official reports from The World Bank. Analysis was performed for all drugs and top ten ATC groups were identified and compared in both countries for two years – 2009 and 2010. **RESULTS:** The Health expenditure; total (% of GDP) in B&H was 10.94 in 2009 (10.31 in 2008), CRO - 7.83 in 2009 (7.83 in 2008). In 2009, total drug expenditure in B&H was 238.8 mil EUR compared to 269 in 2010 (increase of 11,23%), while in CRO in 2009 it was 625.6 mil EUR compared to 664.5 in 2010 (increase of 5,85%). Top 10 ATC 1<sup>st</sup> level drug groups with highest expenditure in both countries in 2009 and 2010 were rather similar but on ATC 2<sup>nd</sup> level we observed significant differences in the share of relevant ATC groups with leading C09, J01 and L01 for 2009 and C09, J01 and A10 for 2010 in B&H. Leading groups in CRO for 2009 were L01, J01 and C09, and for 2010 J01, C09 and L01. No drugs from C10 group were present in top ten ATC 2nd level in B&H as well as R03 in 2009 and 2010 unlike the CRO. **CONCLUSIONS:** CRO has a stable total health expenditure and universal health care system with twice smaller increase in total drug expenditure compared to B&H. B&H is a country with decentralized health care system including drug politics and positive reimbursement drug lists which need to be equalized.

#### PHP16

##### REMOVING THE BARRIER OF COST TO SMOKING CESSATION MEDICATIONS UNDER THE AFFORDABLE CARE ACT OF 2010

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**OBJECTIVES:** As part of the Affordable Care Act of 2010 (ACA), smoking cessation medications (SCMs) including bupropion, varenicline, and nicotine-replacement drugs, will be provided at no cost to people with health insurance. However, the scope of the potential impact of this policy was unclear. This study explored which populations would benefit from this mandate. **METHODS:** A retrospective cross-sectional study using the nationally representative Medical Expenditure Panel Survey 2009 was conducted. Adults who currently smoke, advised by doctors to quit smoking, or diagnosed tobacco-use disorders were extracted for analysis (weighted N=40,095,913). Chi-square tests and one-way ANOVAs were conducted to examine the heterogeneity in SCM use and related out-of-pocket expenses with respect to socio-demographic factors. A logistic regression was performed to examine the associations between socio-demographic factors and SCM use. All analyses were weighted based on complex survey design. **RESULTS:** Of the 40,095,913 smokers, only 3.1% of them used SCMs in 2009, whereas 52.1% were advised by doctors to quit smoking. Chi-square analyses revealed significant differences in SCM use based on race/ethnicity, relationship status, health insurance status, HMO status, perceived mental health status, and comorbid depressive/bipolar disorders (all  $p < 0.001$ ). Uses in bupropion and varenicline also varied with health insurance status (both  $p < 0.05$ ). There were significant differences in out-of-pocket expense for SCMs between smokers with different insurance status, with the uninsured paying the highest out-of-pocket price ( $p < 0.001$ ). The logistic regression revealed that non-Hispanic blacks were less likely to take SCMs compared with Hispanics (OR=0.30,  $p < 0.01$ ). **CONCLUSIONS:** Cost is a substantial barrier to SCM use among smokers. Once this barrier is lifted with the ACA, many smokers who do not currently use SCMs are likely to use SCMs unless they have unfavorable attitudes towards SCM use and smokers who currently use SCMs might switch to more effective but expensive SCMs.

#### PHP17

##### CONSUMPTION PATTERNS, TRADITIONAL MARKET AND REGULATION IN THE PHARMACEUTICAL INDUSTRY. EVIDENCE FOR TWO THERAPEUTIC GROUPS IN INSURED POPULATION

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**OBJECTIVES:** This paper proposes, based on a theoretical framework for estimating demand functions under uncertainty, to highlight the importance of including

economic variables of market operation and actors strategic organization in the design of regulations on the pharmaceutical sector. They can contribute beyond the value of pharmacological and clinical tools in the specification of standards within a framework of evidence-based medicine and the dynamic analysis of cost-effectiveness in decision making from an institution of sectoral superintendence of social insurance. **METHODS:** With a database of 9147 and 27647 comments on covered population prescriptions by social security in Argentina, we analyze the therapeutic groups of hypertensive and lipid lowering, respectively, by the classical least squares estimation and logistic models for each product. **RESULTS:** The data provide consistent messages about the presence of differentiation mechanisms that overshadow the traditional negative relationship between price and sales. In particular, the interaction between brand and drugs, which can be extended to technological changes in a dynamic context, implies a complementary perspective in designing the regulatory framework. **CONCLUSIONS:** The power of negotiation and establishment of rules of producers must be considered in each particular case, to coordinate incentives to encourage rational behavior in prescribing, moving in a pattern of more cost-effective.

#### PHP18

##### INTRODUCING THE WESTERN P&MA MODEL IN THE MIDDLE EAST: UAE AS A CASE STUDY

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**OBJECTIVES:** There is a need as well as a demand for understanding the influences that are changing the landscape in terms of pharma management in the Middle Eastern region. This research is focussed on the UAE, one of the pioneers of a formal pharmaceutical assessment, to understand drivers of reform and implications. **METHODS:** Initial desk research was conducted to understand trends in reimbursement decisions and pricing of drugs. This was followed by in-depth interviews with 4 stakeholders in the Emirati system to understand historical influences, current trends, drivers for decision making and future changes expected. These data were analysed qualitatively to produce results. **RESULTS:** All respondents (n=4) thought of the UAE as one of the regional pioneers of adopting Western-style pharmaceuticals management systems. The imminent introduction of US-style PBMs is likely to be a major step in this direction. In addition, the government are working on the development of a centralised patient record that will include GCC/ME countries. This will help providers access patient history easily, prescribe more efficiently, avoid medication errors amongst other things. The increasing cost of drugs associated with the universal health insurance system (doubled national fund for the purchase of medicines this year) along with the high use of imported drugs was thought to be the most important driver for reform by majority of the respondents (n=3). All respondents were aware of the regional influence of the UAE reforms. **CONCLUSIONS:** P&R of pharmaceuticals is expected to move from a chaotic system to a more transparent, regulated one that requires submission of PE evaluations and clinical evidence. The MOH has already started developing a patient registry to assess validity claims from manufacturers. In a country where most of the drugs are imported due to lack of local manufacturing capabilities, it will become an increasingly important market for international manufacturers.

#### PHP19

##### CONSUMPTION OF DRUGS FOR PEPTIC ULCER AND GASTROESOPHAGEAL REFLUX DISEASE: STRIKING DIFFERENCES BETWEEN SERBIA AND NORWAY

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**OBJECTIVES:** To analyze the consumption of medicines for the treatment of peptic ulcer and gastroesophageal reflux disease (ATC subgroup A02B) in Serbia in correlation with Norway. **METHODS:** Data on drug utilization in 2009 have been provided by the annual reports of the Agency for Drugs and Medical Devices of the Republic of Serbia and the Norwegian Institute for Public Health. The results were expressed as the number of defined daily doses per 1000 inhabitants per day (DDD/TID). A qualitative analysis was carried out according to the Drug Utilization 90% (DU90%) approach. **RESULTS:** The overall consumption of medicines for peptic ulcer and gastroesophageal reflux disease was twofold lower in Serbia than in Norway (21.16 DDD/TID vs. 42.31 DDD/TID). Histamine H2-receptor antagonists accounted for 73% (15.43 DDD/TID) of A02B medicines consumption in Serbia versus 14% (6.11 DDD/TID) in Norway. Whereas in Serbia, proton pump inhibitors participated with 26.26% (5.56 DDD/TID) within A02B subgroup utilization, the share of these medicines in Norway was 84.42% i.e. 35.72 DDD/TID. Within DU90% segment, 4 (of 7) medicines have been found in Serbia and 5 (of 10) in Norway. The most commonly used medicines within A02B subgroup in Serbia were ranitidine (60.9%, 12.9 DDD/TID), omeprazole (12.7%, 2.69 DDD/TID), famotidine (11.9%, 2.53 DDD/TID), and pantoprazole (7.7%, 1.63 DDD/TID), whilst in Norway were esomeprazole (33.9%, 14.34 DDD/TID) followed by pantoprazole (19.3%, 8.18 DDD/TID), omeprazole (15.7%, 6.67 DDD/TID), lansoprazole (15.4%, 6.53 DDD/TID) and ranitidine (10.6%, 4.51 DDD/TID). **CONCLUSIONS:** Besides the quantity, the pattern of use of medicines for peptic ulcer and gastroesophageal reflux disease showed differences between observed countries. Differences in prescription regulations, price and reimbursement most likely influenced the type and amount of medicines consumed.