change physician behavior by implementing new protocols and continue to monitor ongoing administrations of multiple CT scans. The study also warrants potential investigation of similar European hospital databases.

PHP92
STAKEHOLDERS'S VIEWS ON RECENTLY INTRODUCED MEASURES TO PROMOTE GENERICS CONSUMPTION IN GREECE

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OBJECTIVES: The economic crisis has led Greece to adopt measures towards reducing public pharmaceutical expenditure. One of the most important key sectors addressed was that of the market share of generics. The aim of the study was to evaluate stakeholder's perceptions of the recently introduced or planned pharmaceutical policy reforms regarding generics policy in Greece. **METHODS:** A qualitative study, using the method of semi-structured interviews was conducted. We identified 24 decision makers and opinion leaders from public and private organizations, after developing an influence map. In total 17 interviews were conducted, using an open-ended questions guide. The interviews were tape recorded, transcribed and content analyzed. **RESULTS:** The majority of stakeholders perceived the prices of generics as "high" and "non-competitive" and their pricing system as problematic, also highlighting the lack of incentives for increased use of generics that results in low penetration in the market. An important issue strongly emphasized was the introduction of stricter audit and quality control mechanisms. Regarding INN prescribing, stakeholders appeared to be skeptical for both its effectiveness and its viability, as concerns focusing on the maturity of the system, on the culture and education of the physicians and on the lack of monitoring mechanisms, cannot guarantee its effective implementation. **CONCLUSIONS:** There is general agreement that a generics policy in Greece should aim at having low prices and higher generic penetration in the market, by introducing incentives for all stakeholders as well as ensuring the quality and safety of generics. The introduction of INN was not clearly deemed as a measure that can assist to achieve the goal of containing pharmaceutical expenditure. The pricing system of generics has now been reformed, leading to lower prices. Further policy measures are needed in the framework of a comprehensive generics policy in order to increase generics consumption.

PHP93
DEVELOPMENT OF BIOSIMILAR MARK IN EU-5 AND USA

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OBJECTIVES: Identify differences of biosimilar uptakes across the EU big five: France, Italy, Germany, UK, Spain, and USA. **METHODS:** We identified policies and biosimilars market shares in volume and value in EU big five: France, Italy, Germany, UK, Spain and USA. We browsed websites of EU and national (when applicable) drug agencies, ministries of health, HTA bodies, payers, manufacturer unions etc. We completed our research with literature search and grey reports, as well as Datamonitor reports, IMS data and proprietary pharmavitae database. **RESULTS:** Contrary to FDA, EMA has a well defined regulatory path for biosimilars. However, when the US Patient Protection and Affordable Care Act 2010 enters into force in 2014, the biosimilars market will be boosted. Today 80% of this market is in EU. While uptakes in Spain and UK have started to increase, Germany and France account currently for half of the biosimilars market by value in EU with a 36% and 19% share respectively. In UK, biosimilars have had low penetration, and in Italy the market is far behind other countries. Other countries with apparently high sales of biosimilars like Greece are source countries for parallel market. Obviously there is no overlap between the generics market size and the biosimilars one. The slow uptake versus generics can be explained by the low discount of biosimilar price versus branded products and the uncertainty about the clinical effect. **CONCLUSIONS:** The lack of regulatory path in USA makes difficult the launch of biosimilars. However, EU is the experimental field where companies develop their ability to capture this market. Small molecule generics continue representing the main source of cost savings in Europe. Biosimilars represent a huge opportunity for cost saving in the future especially in the USA where the biologic market is leader.

PHP94
DETERMINANTS OF DRUG THERAPY PROBLEMS AMONG MEDICAID PATIENTS RECEIVING A TELEPHONIC MEDICATION THERAPY MANAGEMENT PROGRAM

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OBJECTIVES: To examine predictors of drug therapy problems (DTP) among patients who received a telephonic medication therapy management (MTM) program. **METHODS:** Retrospective data was collected from 712 Medicaid patients who received an initial medication therapy review (MTR) as part of a statewide telephonic MTM program during an 18-month period. Data was extracted from two administrative claims files for health care utilization and prescription dispensing information and one medical record file for MTM program information. For analyses, the main outcome variable was the number of pharmacist-identified DTPs during the initial MTR. Univariate and multivariate models examined the variables of age, sex, co-morbid conditions, number of inpatient, outpatient, and emergency department (ED) visits, number of total, chronic, and narrow therapeutic index drugs, total medication doses per day, and the number of prescribers and dispensing pharmacies for their relationship with the main outcome. For all medication and service utilization variables, only data from the three months prior to the MTR were included. **RESULTS:** At least one DTP was identified in 61.1% of patients (per

patient mean= $22 +/- 25$.) Univariate analyses found that female sex, diagnosis of hyperlipidemia, number of ED visits, number of total and chronic medications, total medication doses per day, and the number of pharmacies where patients had prescriptions filled were significantly ($p < 0.05$) associated with having more DTPs. In multivariate analyses, female sex, diagnosis of hyperlipidemia, number of ED visits, and number of total and chronic medications remained as significant predictors ($p < 0.05$) of DTPs. In sensitivity analyses for 10, 20, 30, and 40 or more DTPs per patient, these variables remained significant predictors in the models except for number of chronic medications. **CONCLUSIONS:** Providers and policymakers planning the implementation of MTM services, particularly for Medicaid patients, may benefit from considering these findings in defining targeted populations for service delivery.

PHP95
EFFICIENCY OF GREEK HOSPITALS: BEST PRACTICES OF THREE TOP-PERFORMING HOSPITALS

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OBJECTIVES: The objective of this paper was to examine the performance of 90 public general hospitals of the Greek National Health System (GNHS) in 2010, rank hospitals according to their efficiency and identify potentials for input reductions. Additionally, the aim of the study was to identify best practices regarding procurement policies for pharmaceuticals and other medical goods used by the most efficient hospitals. **METHODS:** Data Envelopment Analysis (DEA) was used for the estimation of efficiency scores. The number of beds, doctors, management and nursing personnel and total hospital expenditures were used as inputs and number of patient admissions, patient days, outpatient visits and surgical interventions as outputs. In order to identify best practices regarding the efficient performance of the leading hospitals, a panel of academic experts and executives of the three top performing hospitals, was used. **RESULTS:** The results show that only 31% of Greek hospitals are efficient, with a mean efficiency score of 85.5%. Among hospitals with the highest efficiency scores (100%) were two University hospitals and one private-non profit hospital. All three hospitals managed on average, an 11.6% decrease in pharmaceutical expenditure and 20.1% in the procurement of orthopaedics-prosthetics and other medical goods compared to the previous year. At the same time, the number of admissions increased on average by 8.1% and the number of surgical interventions also increased in to hospitals by more than 2%. Regarding the best practices used, the experts agreed that among the most effective procurement policies are tendering and renegotiation with a number of suppliers. Additionally, they all agreed that the introduction of e-procurement decreased pharmaceutical and other medical goods consumption. **CONCLUSIONS:** If the GNHS was to eliminate inefficiency it could save up to 208.5 million euro or 10.3 % of the total budget allocated to public hospitals in 2010.

PHP96
EVIDENCE BASED STRUCTURAL REFORM IN THE PROVISION OF HOSPITAL CARE: THE CASE STUDY OF MERGING TWO INSTITUTIONS IN HUNGARY

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OBJECTIVES: In difficult economic periods policymakers implement cost-containment measures in the specialty care. Therefore hospital managers have to improve the technical efficiency of operation. In Hungary merger of hospitals were initiated to take advantage of economies of scale. Our objective was to assess whether the merger of the Clinical Center of University of Pecs and the Hospital of Baranya County in 2010 improved the sustainability and technical efficiency of these institutions. **METHODS:** Our analysis was based on data from the controlling system of these institutions. We compared revenues, costs, number of cases and performance data before (2009) and after the merger (2011). **RESULTS:** After the merger the National Health Insurance Fund Administration (NHIFA) cut the performance volume limit (PVL) of the institution by 11,7%. This resulted in a reduction of patient volumes and revenues. The number of cases decreased differentially: it fell by 9,2% on those departments that were previously operated parallel by both institutions, and only by 2,7% on those department that were earlier only operated by the Clinical Center. The total bed utilization rate also declined by 6,2%. The management of the Clinical Center could reduce the operational costs by 958 million HUF by decreasing the number of staff and renegotiating supply contracts. However due to the decreasing PVL the cost/DRG increased from 136'600 to 149'600 HUF/DRG. **CONCLUSIONS:** The management of the hospitals applied ceteris paribus assumptions when predicting the outcomes of merge prior to the decision. NHIFA implemented serious cost-containment measures as a consequence of the economic crisis. Despite of significant reduction in operational costs, the technical efficiency of the Clinical Center declined. The institution could not properly adapt to the loss of revenue caused by the PVL reduction after the merger. In difficult economic period the ceteris paribus assumption has to be supplemented with scenario analysis.

PHP97
THE REGIONAL DISTRIBUTION OF DISABLED PENSIONERS OF HUNGARY

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OBJECTIVES: However, the number of disabled pensioner under and in normal

retirement age has decreased in the past few years, it is still quite high. 29,8 % (2010) of the population receive pension, allowance and pension-like providing. More than one fourth of them are disabled pensioners whose 50 per cent are under the retirement age limit. This causes a considerable medical and economic problem. **METHODS:** We have examined the alteration of the number of disabled pensioners living in Hungary in regard to sex and age distribution according to the datas of KSH. We have examined the number of the disabled pensioners in relation of total pensioners, in relation of the underaged and in normal retirement age. **RESULTS:** A total of 49.5 % of the disabled pensioners are at the normal retirement age limit. They are altogether 7.5 % of the total population. The proportion of the underaged disabled pensioners was 13.9 % on average. In the Central Hungary is 10 % of the retired population, in the region of Central Transdanubian region 11 %, in the Southern Transdanubian region 18 %, in the Northern Hungarian region 16 %, in the Northern Great Plain region 18 %, in the Southern Great Plain it is 11 % in 2010. The rate of the underaged disabled pensioners is in Tolna, Békés, Szabolcs and in Csongrád county is the highest, and int he capital and int he Western Transdanubian counties is the lowest. The gender distribution of disabled pensioners is around 50 % in every region. **CONCLUSIONS:** The large number of the disabled pensioners, especially who are under the age limit, and their proportion of the total and retired population can be explained by labour market and health conditional reasons which signifies serious health and economic problems.

PHP98
PATIENTS PREFERENCES VERSUS PHYSICIANS JUDGMENT: IS THERE A DIFFERENCE IN HEALTH CARE DECISION MAKING?

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OBJECTIVES: It is known that based on information asymmetries there are differences in patients' preferences and experts' judgments. This review intends to assess the available literature to display congruence and differences between patient preferences and physician judgments in regard of methods, attributes used as well as diseases. **METHODS:** Systematic literature review in PubMed/Medline was focused on the methods Conjoint-Analysis, Discrete-Choice-Experiment, Standard-Gamble, Time-Trade-Off and Paired Comparison. Out of 836 articles found 102 met the inclusion criteria and were transferred to abstracts/full-text-analysis. 46 studies were extracted comparing patient preferences and experts' judgments. **RESULTS:** Out of 46 studies 13 used Conjoint-Analyses, 10 Discrete-Choice-Experiments, 4 Paired-Comparisons, 8 Time-Trade- /Probability-Trade-Offs, 10 Standard-Gamble and 4 Controlled-Preference-Scales and Prospective-Measures. 8 out of 10 Discrete-Choice-Experiments resulted in a high degree of commonality, while 9 out of 13 Conjoint-Analyses resulted in a certain rate of disagreement. Overall, 23 studies showed poor concordance between preferences and judgments, 11 studies resulted in a reasonable agreement. Thus, studies can be defined with three different distinctions: - no meaningful /significant difference of preferences and judgments verifiable, - no significant difference in the ranking, but meaningful differences of strengths, - meaningful /significant differences. **CONCLUSIONS:** Despite evidence that patients and health care providers often do not agree on treatment decisions, the magnitude and direction of these differences varies depending on the condition or the procedure of interest. The review showed that there was higher concordance between patients and health care providers when the condition was chronic or the service was preventative. However, it cannot be concluded that one certain elicitation-method always resulted in a disagreement while another technique always resulted in agreement. The studies indicated that for most conditions physicians underestimated the impact of side or treatment effects on patients' quality of life. Differences in perceptions may be due, in part, to ineffective communication between the provider and the patient.

PHP99
IDENTIFYING MAJOR OPERATIONAL CAUSES AND POTENTIAL REMEDIES FOR EMERGENCY DEPARTMENT OVER-CROWDING-CROWDING

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OBJECTIVES: Emergency Department (ED) overcrowding (OC) is plaguing EDs worldwide with grave implications on patient and caregiver comfort and quality of care. Many contributing factors have been cited and many approaches tried, without widespread success. Focused Operations Management (FM) integrates novel managerial theories and practical tools {such as the Theory of Constraints (TOC), the Pareto principle, the complete kit concept and the Just-in-Time/LEAN approach} into a systematic approach. It has proved effective in the industry and service sectors, radically improving performance at little additional cost. This approach has great potential but has not been previously adopted in EDs . As a first research phase, interviews with key stakeholders were performed to identify operational causes and potential operational remedies. **METHODS:** Major ED operational challenges, metrics and alleviating measures were extracted through a literature search. Semi-structured interviews with ED head nurses ED managers, hospital administrators and Ministry of Health administrators were conducted. The interviews centered on validation of major challenges identified in the literature, charting unreported challenges and assessing potential utility of FM tools. **RESULTS:** The major challenges identified included ED boarding, prolonged length of stay, unjustified ED utilization and slow access to specialist consults, lab tests and imaging studies. The FM tools assessed to be most promising were "the complete kit" concept and TOC methods to identify and alleviate bottle necks and to reduce "work in progress". Major differences were found in the ranking of five

major ED operational challenges between hospital administrators and ED directors. While ED directors and head nurses ranked as first: ED overcrowding due to patient boarding, it was not ranked at all among the five major challenges by hospital administrators. **CONCLUSIONS:** Improving ED operations is a critical health management issue. An important initial step towards charting possible alleviating measures, is mapping of the challenges and root causes and agreeing on a common language among stakeholders.

PHP100
PREVENTION OR TREATMENT? PREFERENCES OF THE AUSTRALIAN PUBLIC FOR HEALTH TECHNOLOGY ASSESSMENT FUNDING CRITERIA

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OBJECTIVES: To assess preferences for Health Technology Assessment (HTA) funding criteria of a large sample of Australians broadly reflecting the population of Queensland, Australia. **METHODS:** Adults (n=930) were recruited via an internet panel managed by a market research company. Participation quotas broadly reflected the Queensland population by gender and age. Participants completed a Discrete Choice Experiment (DCE) as part of a wider survey on HTA decision criteria. Attributes/levels were based on criteria used in Queensland and a literature review. An orthogonal design (72 choice sets) was used, with participants randomized to one block of 6 sets. Choice data were analysed using a multinomial logit model. **RESULTS:** Participants strongly preferred a technology offering prevention or early diagnosis, and less strongly preferred one that improves quality of life, reduces side effects, or reduces hospital waiting times, compared to technologies improving survival by one year. Participants also strongly preferred treating 35yr old recipients, followed by 10yr olds and then 60yr olds, rather than 85yr olds. Technologies that assist Queenslanders living in rural areas, those providing value for money, those with no available alternative, and technologies assisting indigenous Australians were also prioritised over their counterparts. However, all these advantages were considered relatively less important than achieving prevention or early diagnosis, which equated to approximately double the other gains when marginal rates of substitution were calculated using number benefiting as the denominator. **CONCLUSIONS:** If consistency with public preferences is a requirement for "fair" HTA decision-making criteria, this study provides broad support for criteria used to assess technologies in Queensland. The findings send a clear message of the importance of prevention and early diagnosis as compared to treatment of existing disease from the public's perspective.

PHP101
THE IMPLEMENTATION OF DIAGNOSTIC RELATED GROUPS (DRGS) IN GREECE: ONE MOVE FORWARD TO EFFICIENCY

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OBJECTIVES: In Greece Diagnostic Related Groups (DRGs) were implemented in October 2011. Still their implementation is challenged by social security funds due to its high cost vs. previous per capita reimbursement system. The objective of the study was to investigate the actual cost of two DRG's in Greece emerging from three major hospitals. **METHODS:** A multicenter bottom up cost component analysis was conducted using 69 patients' files from three hospitals to estimate the direct cost per patient. The mean cost per patient and the length of stay (LOS) were calculated for heart failure and for infection/inflammation of the respiratory system. The analysis was carried out with regard to: i) biopathological exams ii) diagnostics, and iii) pharmaceuticals. Econometric analysis was explored to estimate the impact of each cost component on total cost per patient. The results were compared with the official reimbursement prices of the Ministry of Health. The discrepancies between the estimated cost and the official prices of DRG's were assessed using the coefficient of variation (CoV). **RESULTS:** The average cost for heart failure (DRG K42X) was 657.81€ and its official price was 849 €. The CoV were the following: 59% for biopathological exams, 155% for diagnostic exams, 117% for Pharmaceuticals, and 57% for the average cost per patient. The CoV for the average LOS was 47%. For the DRG of infection of respiratory system the estimated average cost per patient was 1122.89 € and the official price was 1040 €. The estimated discrepancies per cost component were: 106% for biopathological exams, 136% for diagnostic exams, 165% for Pharmaceuticals, and 134% for the overall average cost per patient. For the average length of stay the CoV was 77% **CONCLUSIONS:** The launching of DRG system in Greece presents it own unique challenges but further research is needed to verify the DRG mechanism and focus on more DRG's costing.

PHP102
PATIENT SATISFACTION WITH PHARMACIES CONDITION

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OBJECTIVES: The mission of the health system is providing health of the society and satisfaction is an aspect of the human health. Measurement of patients' satisfaction is a way for evaluating health system services. The purpose of this study was to measure patients' satisfaction with pharmacy physical space, services and staff behavior. **METHODS:** A total of 797 pharmacy customers randomly selected from 22 districts of Tehran -the capital city of Iran- completed an anonymous, self-administered questionnaire. **RESULTS:** Including 3.5 as moderate level of satisfaction, there was some dissatisfaction (mean<3.5, pvalue<0.05) about the allo-