CORE

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 fouth 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.

### рнр98

## 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.

## 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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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

Rasekh  $\mathrm{H}^1$ , Rangchian  $\mathrm{M}^2$ , Mehralian  $\mathrm{G}^3$ , Bagherian  $\mathrm{S}^1$   $^1$ Shahid Beheshti Medical University, tehran, Iran,  $^2$ Shahid Beheshti Medical University, Tehran, Iran,  $^3$ Shahid Beheshti University of Medical Sciences, School of Pharmacy, Tehran, Tehran, Iran **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 allocation of sufficient time to respond to patients enquiries, consultations (about patient's disease, non-medical treatments, herbal medicines and supplements), arrangement of service stages, honesty in delivery of scarce medicines, waiting time, compliance of number and type of dispensed items with physician prescription, convenience of pharmacy's lobby space and suitable physical space for communication with pharmacy staff. In addition, according to the result of the Friedman test, the most important issue for patients in the study was observation of courtesy and respect by pharmacy staff. Overall satisfaction measured by weighted values (based on priorities identified by participants) of three components of satisfaction (physical space, service quality and staff behavior) was statistically different from satisfaction measured based on common method (3.48 vs. 3.40, pvalue < 0.05). CONCLUSIONS: Pharmacy customers expect pharmacists to be more involved in providing advice. Also it seems that improvement in design of pharmacies physical space including allocation of an appropriate space for patients to talk with pharmacy staff, specially pharmacist, can increase customer's satisfaction. Observing customers' priorities may have an important influence on interpretation of the results of satisfaction studies and, therefore, on the selection of interventions.

### CHALLENGES AND FUTURE PROSPECTS OF NURSING WORKFORCE IN GREECE <u>Skroumpelos A</u><sup>1</sup>, Gialama F<sup>2</sup>, Daglas A<sup>3</sup>, Skoutelis D<sup>3</sup>, Pavi E<sup>1</sup>, Kyriopoulos J<sup>1</sup> <sup>1</sup>National School of Public Health, Athens, Greece, <sup>2</sup>National School of Public Health, Athens, Greece, <sup>3</sup>Greek Nurses Association, Athens, Greece

OBJECTIVES: Given the financial crisis-driven budget cuts and the experienced shortages in nursing stuff, this study aims to identify the factors that have contributed to nurses shortages, the optimum size of nursing stuff, the potential improvement of nurses skills and role and the more effective measures to cope with the current circumstances. METHODS: Experts from the fields of nursing and hospital management were invited to participate in an expert panel and asked to provide their opinion on the issues concerned with the objectives of the study. RESULTS: Of the 32 experts invited 20 (62.5%) accepted to participate. The majority of the panelists argued that the main reasons of nurses' shortages are the lack of workforce planning and the undersupply of nurses. Experts supported that nursing personnel should at least triple (10.5 nurses/1000 population and 2.5 nurses/hospital bed) and the nurses-doctor ratio should change from 0.61 nurses/doctor to 3 - 4 nurse/ doctor. Most of the experts argued that more nurses should be university graduates and continuing education programs should be introduced. The substitution of doctors' services from nurses was widely accepted and argued that nurses' role can be expanded to prescribing, to the provision of preventive services, to the management of chronic condition patients and to diagnostic tests interpretation. Finally, in light of reduced health care budgets it was argued that shortages-driven issues could be partially addressed by redistributing the existing personnel according to population and hospitals' needs. CONCLUSIONS: The measures suggested for the improvement of nursing services quantity and quality may obscure in the constraints imposed by the current financial crisis. Redistributing the existing personnel can only provide a temporary solution. However, this study stresses the need for an effective workforce planning in order for the health system to guarantee an adequate level of services and equity in access, in times of reduced budgets.

# PHP104

## A CORRESPONDENCE ANALYSIS OF THE PATIENT'S PERSPECTIVE ON SHARED DECISION MAKING AT THE FAMILY-PHYSICIAN UNIT

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OBJECTIVES: This project evaluates the patients' perception about Shared Decision Making in primary attention in a single city. Also identify potential barriers and facilitators for the shared decision making in the clinical practice. METHODS: It is a quantitative study. All patients registered for family health care were invited. A questionnaire covering demographic data, multiprofessional team, knowledge of the health-illness and models of patient-physician relationship was developed and validated through a previous pilot study. Statistical analysis was performed through descriptive techniques and multiple correspondence analysis (to test associations among the categories). RESULTS: We interviewed 278 patients, 50% Caucasian, 79% female, 24% between 20 and 29 years and 42% with incomplete primary education. Fourt-one percent are unemployed and have income between one and two minimum wages. Of them, 78% and 78.4% consider the multidisciplinary work very important and its inclusion in the process of treatment, respectively; 71.58% prefer to decide the treatment with the doctor. Most users could not differ types of patient-physician relationship, as paternalistic, shared and informed decisions. A correspondence analysis plot was used to illustrate similarity of multidisciplinary team and shared decision making. Female, mestizo, and age between 30 and 39 years was associated with more willingness to share the decisions with the physician, according to correspondence plot analysis. There was no association between comprehension, decision-making and having a chronic disease or not. The other answers have no association with any category. **CONCLUSIONS:** This study demonstrated that patients on primary care believe that a multi-professional teamwork is important to apply shared decision making on clinical practice. The comprehension about informed, shared and paternalistic decision-making is confused for this sample. Comparative studies between primary care and specialties may assist the implementation of shared decision making, considering peculiarities in both kind of health care.

IMPACT OF CLINICAL PHARMACY PROGRAM ON PRESCRIPTION ERRORS IN A LEBANESE INSTITUTION: A COST BENEFIT ANALYSIS

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OBJECTIVES: The minimal role of clinical pharmacists on the medical floors in several health care institutions in Arab countries, had led to the concern of prescription errors. The objectives of this study was to determine if the presence of a clinical pharmacist could be cost beneficial when even limited to avoiding medication transcription errors and unnecessary medication use for the prophylaxis of stress ulcer and deep venous thrombosis. METHODS: A total of 1672 medication orders were reviewed to assess the prevalence and type of transcription errors for 255 patients in the internal medicine over a 6-month period between December 2011 and May 2012. Pharmacy interventions were documented by clinical pharmacy students during clinical rounds to determine inappropriate medication use. A cost benefit analysis of introducing a clinical pharmacist on the medical floor was performed. RESULTS: A total of 389 (23.3%) transcription errors were identified and classified as 1) failure to transcribe medications from charts into pharmacy orders (39.58%); 2) error in transcribing medications into pharmacy order (33.67%); or 3) errors in medication administrations to patients (26.71%). The benefits of introducing a clinical pharmacist on the medical floor originate from the anticipated reduction of the losses caused by transcription errors, decreased length of hospitalization stay, and reducing unnecessary medication use where a total of \$49,885.5 would be saved which is almost three times the annual salary of a junior pharmacist in Lebanon, and a net benefit of \$13,885.5 could be obtained. CONCLUSIONS: The implementation of clinical pharmacy in Lebanese health care institutions is needed to optimize healthc are clinical outcomes and subsequently minimizing medication errors and economical burdens.

## IMPACT OF PAYER PERCEPTIONS OF PHARMA COMPANIES ON ACCESS DECISIONS - AN ANALYSIS OF UNPROMPTED EXPRESSIONS IN PAYER INTERVIEWS

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OBJECTIVES: As payer decisions become increasingly evidence based, a key question is whether payer on national/regional level are impacted by company perceptions when assessing evidence and making decisions. To identify what perceptions payers have, if and how these impact their decisions and what differences exist across stakeholders and companies, we analysed unprompted expressions of perceptions obtained from interviews performed with national/regional payers. METHODS: We analysed 543 national/regional payer interviews, performed for 100 projects by IMSCG 2008-2011 in Europe, including 900 quotes with unprompted expressions compressed in 1900 buzz-words. Interviews were screened for quotes reflecting perceptions of pharma unrelated to research objectives. Only unprompted expressions were extracted and buzz-words created that compressed expressed perceptions into single words/phrases. Half of the quotes expressed perceptions of specific companies. Analysis of the impact of perception on payer decisions was based on 5% of overall quotes containing that link. Buzz-words were valued, ranked according to occurrence and categorized into perception causes (reputation, interaction, employees, portfolio and research). Payers validated approach and outcomes. RESULTS: Perceptions are predominantly caused by company reputation and interaction, with national payers more influenced by reputation, regional by pharma interactions. Differences exist between portfolio versus employee perception, the former predominant in national, the latter in regional payers. While 60% of buzz-words were positive, results differ with national payers being significantly more critical towards industry then regional. The industry perception was more negative than perceptions expressed for individual companies. Perceptions directly impacting payer decisions were all negatively motivated by reputation, interactions and product perceptions ('me-too'), predominantly impacting access. CONCLUSIONS: Payers are influenced by company perceptions, which impact their decisions. Negative industry perceptions can be changed by companies; focus should be on national payers as regional have more positive perceptions already. Changing negative perceptions of company reputation, collaboration experience and employees' qualifications might avoid negative impact on access decisions.

# EXPERTS' VIEWS ON THE INTRODUCTION OF A MONOPSONY IN HEALTH CARE SERVICES IN GREECE

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OBJECTIVES: In light of the financial crisis, the largest social insurance funds were merged. This study aims to investigate the possibilities of a monopsony and to propose alternative methods for the new fund to allocate resources and to reimburse physicians. METHODS: A structured questionnaire concerned with the potentials of the new initiative, the resource allocation method and the physicians' reimbursement methods was constructed. An interdisciplinary expert panel was assembled and asked to provide its opinion on the above issues. RESULTS: A total of 66.7% of the experts supported the monopsonistic character of the fund unlike 33.3% who preferred a bilateral monopoly structure. However, expert's opinion on the potential of the fund to control expenditure and reduce cost of time and prices was not clear, while the majority argued that the fund can hardly guarantee adequate quality services. 68.2% agreed on the introduction of regional global budgets and the majority argued that the parameters to calculate the budget should be the region's population, the female, the birth, the elderly and the chronic condition patient rates and the standard mortality ratio. The introduction of an internal