of the case mix of the hospital activity. As a consequence, it could be a useful model to increase the awareness of the economic impact and to allow a more informed management at hospital and regional level.

### PHP90

**PHARMACOECONOMIC ANALYSIS OF IVOSEROL VS IOHEXOL FOR DIAGNOSTIC PROCEDURES**

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**Objective:** The aim of our study is to analyze the costs incurred by hospitalized patients in 2010, in the intensive care unit (ICU) of San Leonardo Hospital (Southern Italy). **Methods:** A retrospective cost analysis was performed on patients with a length of stay of 24 hours. Direct medical costs were estimated (hospitalization, surgical procedures, devices). The costs of hospitalizations and surgical procedures were calculated based on the 24.0 version of the tariff system DRG (Diagnosis Related Group). The data on the costs of the devices were provided by the management of the hospital pharmacy. To evaluate the burden of the diagnostic groups two indicators were used: cost per surviving patient (total resources used / total survivors) and money loss per patient (total resources used for dead patients / total dead). **Results:** A total of 201 patients hospitalized in the ICU in 2010 were selected and analyzed depending on their diagnostic group. Hospitalized patients who had a hospital stay longer than or equal to 24 hours, were 95% of the sample. Most frequent diagnostic groups have been: edema (16.4%), left heart failure (13.9%) and COPD (9.0%). There is a wide variation between the average costs per patient probably due to the difference in duration of hospitalization (from a minimum of € 2,777 in stroke, to a maximum of € 7,303 in hypothetical gastric ulcer). Intracranial bleeding is the disease causing the highest costs per dead or survived patient. The nephro-urological and neurological diseases are characterized by the lowest costs, for dead and survived patients. The first intervention that affected the netcost was CI-AKI: in the sensitivity analysis, the cost saving due to the lower incidence of CI-AKI was € 208. **Conclusion:** The results are a starting point for further investigations aimed at the exploitation of resources absorbed by ICU opposed to the need to provide patients with the best possible health care.

### PHP91

**HEALTH ECONOMIC EVIDENCE FOR MEDICAL NUTRITION: ARE THESE INTERVENTIONS WORTH THE MONEY?**

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**Objectives:** Medical nutrition (MN) targets patients with malnutrition or with specific disease such as Crohn’s disease (CD) to support their recovery. Efficacy of MN has been demonstrated in malnutrition, as well as in paediatric CD or gastroenterology. MN has a low economic impact and a high level of evidence is known. This article summarizes the findings of a systematic literature search on health economics evidence of MN in order to understand what the value for money of MN interventions is. **Methods:** A systematic literature search was performed to identify publications related to health economics evidence of MN. The result of it was communicated elsewhere. For selected articles, the clinical background, basis of the analysis, health economic design and results were extracted and summarized in relevant disease areas. **Results:** Among the 32 articles found, 11 covered malnutrition, 9 related to GI surgery, 6 studied cow milk allergies (CMA), whereas the remaining focused on various diseases. When targeting malnutrition, MN was accepted as an effective and cost-effective prevention for GI damage. When used in GI surgery, when taking into account the full episode of care, oral and enteral nutrition was assessed as good value-for-money. In CMA, there was a significant health care budget impact of untreated food allergy symptoms of allergy. In the remaining indications, the use of enteral tube feeding was seen as being cost-saving compared to parenteral nutrition. **Conclusion:** Based on a systematic literature search, MN interventions showed value for money in different health care settings. Although few studies calculated an incremental cost-effectiveness ratio (ICER), those calculated were all below thresholds applied in medical settings. In addition, most of the times MN was more effective and cost saving, thus a dominant option. However, more research is needed to strengthen economic modelling for medical nutrition interventions.

### PHP92

**IMPACT OF PHARMACOECONOMICS MODELLING ON REIMBURSEMENT OF MEDICINES IN SERBIA**

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**Objective:** To assess the impact of recently published (2011) Guidelines for Pharmacoeconomic Evaluations for Serbia and ISPOR Guidelines (2013) on the methods and the conduct of budget impact analysis (BIA) during reimbursement submission. **Methods:** We investigated how many reimbursement submissions were made with an accompanying BIA to the Health Insurance Fund in Serbia from 2012 to 2014. Of the 106 submissions identified 85 were showed to be BIA up with the possibility to customize each type of data, consumptions and unit costs. **Results:** We calculated the average (AVG) and the confidence interval (IC) for the incidence of each type of cost among the different surgical procedures. For the low and of the range we observed the highest average in: **Conclusion:** It was shown that it is not an obligatory part of the submission dossier. It is recommended at this moment, but the plan is to make it an obligatory part. BIA simply quantifies the financial consequences of using health-care services, comparing reference with alternative options. This template for BIA helps decision-makers in different types of hospital to manage the allocation of resources. **Conclusions:** The availability of a template for BIA would increase transparency, the quality of submissions and pro...
mote its use. The audience includes those who develop, submit or use budget impact models and committees who evaluate reimbursement submissions. With a list of Guidelines for Pharmacoeconomic Evaluations, ISPOR Guidelines and proposed BIA template (which will be published in the updated version of the Guidelines for Pharmacoeconomic Evaluations) the quality of submissions to the HIF in Serbia would be raised and the decision time could be reduced.

PHP3
THE SUSTAINABILITY OF IRISH PHARMACEUTICAL EXPENDITURE
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OBJECTIVES: The recent economic crisis has threatened the sustainability of many international economies as well as their health care systems. The objective of this paper was to quantify recent cost containment measures used to reduce Irish public pharmaceutical expenditure in light of the ongoing fiscal restraint.
METHODS: Pharmaceutical expenditure across the EU was briefly examined based on current OECD data. The main pharmaceutical cost containment measures recently adopted in Ireland were identified under the headings of drug prices, fees/mark-ups and coverage/co-payments with full year 2011 public savings estimated.
RESULTS: €308m of the total cost of health and social care for 2011 in Ireland, fifth of all health expenditure. At €528, Ireland spent more on pharmaceuticals than any other European country on a per capita basis and 50% more than the average across EU member states. Governments under pressure to maintain a sustainable national health system and reduce deficits, while still preserving acute care levels, are cutting pharmaceutical expenditure. Many European countries, including Ireland, have increased the use of cost containment measures including a mix of price and volume controls. Collectively, these measures were estimated to have reduced Irish public pharmaceutical expenditure by €380m in 2011. The main cost containment measures used involved addressing: 1) the ex-factory price of drugs including price cuts of up to 40% on off-patent and generic drugs leading to an estimated €200m saving, 2) pharmacy dispensing fees and mark-ups via a new dispensing fee structure and reducing both retail and wholesale mark-ups with €100m saving, 3) scheme cover restrictions in co-payments including restricting scheme coverage for persons over 70 years and increasing the level of co-payments with savings of €80m.
CONCLUSIONS: There use of pharmaceutical cost containment measures to decrease health expenditure is a trend that is likely to continue for some time yet.

PHP4
BASELINE ATTITUDE TOWARDS HEALTH CARE RESOURCE ALLOCATION DECISION MAKING IN JAPANESE PEOPLE – UTILITARIANISM OR EGALITARIANISM?
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OBJECTIVES: Japan is now confronting budget constraints and trying to introduce economic evaluation into health care resource allocation. To clarify the basic attitude towards health care resource allocation in Japanese people, a national survey was conducted. METHODS: A survey was carried out in a face-to-face manner with random sampling on the 50 municipalities in Japan, adjusting for age and sex, between July and August 2013. The questions were as follows: Question 1 “Imagine that there are two clinical examinations (A: less expensive with low power; B: more expensive with high power) and choose from the following two options: 1) both the examinations receive examination A and subsequently the death of 1,000 people is prevented; option 2: a half of the subjects is selected by lottery and receives examination A, preventing the death of 1,100 people as a consequence.”; Question 2 “Imagine that there are two types of diseases differing the treatment cost (A: 10 million yen per patient; B: 2 million yen per patient), and allocate 100 million yen to these diseases.” RESULTS: Out of 1143 respondents, 601 chose the option 1 in question 1. In question 2, 217 chose the least utilitarian combination(A&B, B&10), 139 chose 2nd combination(A&B, A&B, 0), 289 chose 3rd one(A&A, B&10), 67 chose 4th one(A&A, B&0), and 379 chose the most utilitarian option(A,A, B&0). The weak correlation was observed in the utilitarian trend and age (r=-0.29, p <0.01). Utilitarian tendency to maximize the health benefit varied among respondents with different educational backgrounds. CONCLUSIONS: We investigated the basic attitude towards health care resource allocation in Japanese people by answering to specific scenarios, which could be realized by the adoption of day surgery by the government budget. RESULTS: Sixty-two DRGs were identified as suitable for day care. The procedures of the eye (16%), the ear, nose and throat (51.3%), the myoskeletal system (9.7%), the kidney and the urinary tract (9.7%) and the female reproductive system (9.7%) have the hospital marginal cost of an increase in the length of stay by one day was estimated at 563.32 euros (95%CI: 541.6-585.1). The capital savings were estimated at 2.01 million yen to labor opportunity cost is included the amount saved exceeds 225 million. CONCLUSIONS: In light of the economic crisis and the continuously reduced health care budget, the current system should adopt cost-effective intervention in order to preserve a satisfactory level of health services output. As this study concludes, day surgery can save a great amount of resources and according to the international literature can also guarantee patients’ safety and satisfaction.

PHP6
CHRONIC PATIENTS’ PERCEPTIONS ABOUT GENERIC MEDICINES IN GREECE: FINDINGS FROM A CROSS-SECTIONAL SURVEY
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OBJECTIVES: The Greek authorities implemented mandatory generic substitution policies to expand the use of generics, due to reasons of cost-containment. However, Greece lacks a strong, established generics culture. This study aims to investigate chronic patients’ perceptions on generics in Greece.
METHODS: We carried out a cross-sectional study among 1600 patients from four chronic illness groups (HTN, Diabetes, COPD and Alzheimer mild to moderate stage). Logistic regression analysis was used to determine the factors associated with chronic patients’ perceptions. RESULTS: Of 1600 patients, 1594 responded to the survey (99.6%). Only 57% has used generics in the past, 39.3% considers them safe. 38% thinks that the generics have the same quality standards as the originals and 37.3% believes that they have the same treatment outcomes. 63% expressed concern on potential adverse effects from generics. 58% argues that the drug’s country of origin affects the safety. Statistical analysis revealed that generics quality has a statistical significant relationship with patient’s income (OR 1.24, 95% CI 1.00-1.9), age (OR 0.99, 95% CI 0.95-1.03), gender (OR 0.73, 95% CI 0.57-0.94) and health status (OR 1.00, 95% CI 1.00-1.02) while generics effectiveness was positively related with the patient’s income (OR 1.10, 95% CI 1.02-1.20), gender (OR 0.70, 95% CI 0.55-0.90) and health (OR 1.00, 95% CI 1.00-1.01). Women and the elderly are less likely to consider that the generics have the same standards as the originals. CONCLUSIONS: Our findings reveal that chronic patients express reservations towards generic medicines which in an extent can probably explain the low generic market share in Greece. Perceptions about generics were found significant related mostly with patients’ demographic characteristic. The latter can be considered as useful information as it assists stakeholders to identify on which chronic patients groups should direct campaigns in order to encourage generic drug use as a means to control expenditures and to save resources for innovative drugs.

PHP7
ANALYSIS OF SPANISH GENERIC MEDICINES MARKET: RECOMMENDATIONS TO ENHANCE LONG-TERM SUSTAINABILITY
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OBJECTIVES: To provide an overview of the Spanish generic medicines retail market and to identify policy measures which impede its development. Finally, recommendations for health care system stakeholders in general and the sustainability of the Spanish generic medicines retail market are put forwards.
METHODS: A literature review has been carried out to explore the current situation of the Spanish generic medicines market. In addition, a survey has been developed and interviews have been conducted to validate the information obtained from the literature review.
RESULTS: The Spanish government’s focus on the price level of generic medicines in the past has decreased prices of generic medicines drastically. The current reference pricing system (since 2011) has eroded price differentials between originator and generic medicines in more than 90% of the reference groups. Differing policies at the demand-side have resulted in differing generic market shares between the autonomous communities. Policies are needed to increase both the efficiency of the health care system with more focus to pharmaceuticals (e.g. electronic prescribing, prescribing by international non-proprietary name, etc.) and the sustainability of the Spanish generic medicines retail market (e.g. creating price difference between originator and generic medicines, accelerating market entrance, building and improving trust for generic medicines in patients and physicians, etc.).
CONCLUSIONS: The low volume of generic medicines prescribed in Spain combined with the continuous pressure on the price level of generic medicines threatens the sustainability of the generic medicines industry. The reduced price difference between originator and generic medicines tends to differentiate generic medicines drastically. The current reference pricing system (since 2011) has eroded price differentials between originator and generic medicines in more than 90% of the reference groups. Differing policies at the demand-side have resulted in differing generic market shares between the autonomous communities. Policies are needed to increase both the efficiency of the health care system with more focus to pharmaceuticals (e.g. electronic prescribing, prescribing by international non-proprietary name, etc.) and the sustainability of the Spanish generic medicines retail market (e.g. creating price difference between originator and generic medicines, accelerating market entrance, building and improving trust for generic medicines in patients and physicians, etc.).

PHP8
ACCEPTABILITY OF INDIRECT EVIDENCE TO SUPPORT DRUG REIMBURSEMENT IN AUSTRALIA
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OBJECTIVES: When there are no direct head-to-head trials versus an appropriate comparator, indirect comparisons are commonly performed to support a clinical claim (e.g. the NIHR Cochrane Collaboration). In support of the Pharmaceutical Benefits Advisory Committee’s (PBAC) decision-making process relating to government reimbursement of medicines, there has been a policy change since July 2003. A review of FSIs specific to drugs where the primary claim was based on indirect evidence was undertaken to assess the success of the approach and