each country’s department of health. Countries were reviewed under a range of headings including: current delivery models in place, institutions responsible for delivery and organisation of reimbursement system, incentive structures in place, basic bundle of health care covered, additional options for coverage, disease-specific resource use and health outcomes, government contribution to cost of health care and overall health expenditure of patients suffering from both congenital and rare disease care across countries with Universal entitlement ensures comprehensive medical care for everyone including GP services, access to tertiary care, post-natal care and many other services. This paper provides further information on the characteristics and variation across Universal health care models.

PHP81
NATIONAL RARE DISEASE STRATEGIES: THE CURRENT STATE FOR ORPHAN DRUG MARKET ACCESS IN EUROPEAN UNION (EU) MEMBER STATES

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OBJECTIVES: By 2013 all European Union (EU) member states were recommended to elaborate and adopt a national strategy for rare diseases. This study provides insights into the national rare disease strategies, in particular about the status of the programmes, recent developments, and the congruencies and differences between the programmes regarding market access.

METHODS: A literature and internet search was performed to identify national strategies for rare diseases published by EU member states. Both policies and recent orphan drug introductions have been analysed to compare the rare disease strategies.

RESULTS: All member states had a variety of approaches already in place before developing a national strategy. France is the only country implementing a national rare disease policy. Germany has a focal point for rare diseases with a high number of marketed orphan drugs. Over the past five years, most member states finalised their national plans with a peak in publications late 2013. Germany and France applied methods on indicative pricing and or price cap/price control. Germany also introduced the need for label use, compassionate drug use and utilising cross-border healthcare. Member states with a decentralised market access model (e.g., Spain and Italy) commonly use national funds and decision-making to provide equity in treatment levels across the nation for rare diseases. There are few orphan drug specific pricing policies; however special reimbursement criteria are common especially in countries with cost-effectiveness criteria.

CONCLUSIONS: Increasing patient access to orphan drugs has been a focus point in the national plans for rare diseases. Congruencies in methods will aid the EU’s ambition to align policies at European level. However the implementation phase has only recently been initiated for most plans and actual policies are yet to be developed. As member states such as France are introducing cost- effectiveness in their health care systems one can expect that tailored criteria need to be developed for orphan drug assessments.

PHP82
MEASURING THE EFFICIENCY OF HUNGARIAN HOSPITALS BY DATA ENVOLUTION ANALYSIS

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OBJECTIVES: Hospitals are important cost elements of the Hungarian health care system. Over the past decade, several health care reforms were implemented in Hungary, with the aim to improve healthcare delivery, reduce costs and improve efficiency. This study aimed to analyse the efficiency of hospital beds in Hungary. The aim of our research is to analyse the efficiency of the Hungarian acute inpatient-care system.

METHODS: Data derived from the Hungarian nationwide health insurance database analyzed using technical (Da), scale (Dg) and allocative (De) efficiency (De) of the Hungarian acute inpatient-care system (2003, 2006, 2010). The number of hospitals included into the study was 133 in 2003,125 in 2006 and 93 in 2010. We chose four inputs and two outputs: the number of active hospital beds, the number of discharged patients, the number of one-day cases, completed days of nursing (inputs), average length of stay, DRG cost weights (outputs). The method we used for our calculations was Data Envelopment Analysis.

RESULTS: In 2003 both the technical and scale efficiency were high (TE: 96.9%; SE: 92.9%). To 2006 the situation deteriorated by some degree (TE: 96.6%; SE: 80.3%). By 2010 technical efficiency still did not show improvement (TE: 94.0%), but scale efficiency increased (SE: 88.2%). Usually the hospitals with higher number of beds are more efficient than the smaller units. CONCLUSIONS: The effects of the performance volume limit did not improve the two values; however, the capacity decrease of 2007 did improve the scale efficiency to some extent. The Hungarian health care system needs to reduce the numbers of hospitals and rethink their functions, but needs to improve the size of them.

HEALTH CARE USE & POLICY STUDIES – Formulary Development

PHP83
EXPERIENCES WITH PRICE COMPETITION OF BIOSIMILAR DRUGS IN HUNGARY

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OBJECTIVES: The aim of our study is to analyse the biosimilar bids of the Hungarian pharmaceutical database of Hungarian National Health Insurance Fund Administration. We analysed how the number of patients treated by colony-stimulating factor and erythropoietin products changed before (01.07.2011-30.06.2012.) and after (01.07.2012-28.02.2013) the Hungarian biosimilar bid process in March 2012 in Hungary.

RESULTS: In the 12 months before biosimilar bid 4167 patients received erythropoietin treatment, while in the first 12 months after the bid 3647 patients, indicating a decline in the use of these products by 12.5%. In the 12 months before biosimilar bid 13954 patients received colony-stimulating factor treatment, while in the first 12 months after the bid 13352 patients, resulting in a 4.5% decline.

CONCLUSIONS: The analyses of the Hungarian price competition bid of biosimilar products showed a minimal decline in the use of erythropoietin products while the health insurance reimbursement of these drugs significantly decreased.

PHP84
IMPACT OF PRIOR AUTHORIZATION RESTRICTIONS ON RESOURCE UTILIZATION AND COSTS IN US HEALTH PLANS: A REVIEW OF LITERATURE

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OBJECTIVES: Prior authorization (PA) restrictions have been implemented by US health plans as an effort to ensure appropriate utilization and cost control. A review of published peer-reviewed literature was conducted to evaluate the impact of such PA restrictions on resource utilization and costs.

METHODS: A targeted review of literature was conducted in Medline from 2009 onwards using keywords “prior authorization,” “impact,” “economic.” Review articles, non-English language studies, non-US studies, and studies evaluating the effectiveness of formulary policies of which PA may be a component were excluded. Impact of PA policies on health care utilization and costs was qualitatively assessed.

RESULTS: Fourteen studies were identified which met our inclusion criteria. Majority (57%) of the studies were conducted on Medicaid plans (Medicaid: 8, commercial: 4, Medicare: 1, not clear: 3). Majority (57%) of studies evaluated the impact of mental health medications (anti-convulsants, anti-depressants bipolar medications, antipsychotics), two studies were conducted on anti-diabetics, one on a multiple sclerosis drug, one for a lipid-lowering drug, one on an anti-aging drug and one on a vaccine. Few studies were industry-sponsored. 12 studies were retrospective data analyses and only 2 studies were decision-analytic models. Overall, the trend showed that PA restrictions were effective in reducing resource utilization and health care costs, but few studies have raised concerns on patient safety and quality of care outcomes due to PA policies.

CONCLUSIONS: Although PA restrictions may result in cost savings, patient safety and quality of life concerns must also be evaluated while imposing these restrictions. Rigorously designed studies including assessment of PA administration costs as well as indirect costs due to lost productivity should be conducted to better assess the overall economic impact of such restrictions.

PHP85
DO NICE DECISIONS AFFECT DECISIONS IN OTHER COUNTRIES?

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OBJECTIVES: The objective is to test the hypothesis whether NICE recommendations on the use of a new drug affect recommendations from other bodies in countries outside England and Wales. To our knowledge, this is the “first attempt to approach this topic quantitatively. Therefore, a sub-objective is to determine the feasibility of gathering a high quality database with sufficient number of observations to test our hypothesis.

METHODS: A basket of 29 drug/indication pairs and a group of 51 countries were included (Australia, Canada, Denmark, France, Italy, Korea, The Netherlands, New Zealand, Poland, Portugal, Spain, Bosnia, Ecuador, Egypt and Ghana). Information regarding NICE HTA recommendations was extracted from NICE’s website. However, an online survey which hospital leaders was carried out to collect information regarding the HTA decision in 10 countries. For the remaining five countries, we used the information from their official webpage. We descriptive analyses were conducted, including an examination of the position of a NICE decision in comparison with the HTA agencies in the timeline of decision making about the 29 medicines.

RESULTS: There is a lack of comparability between the publically available information. The findings suggest that the position of a NICE appraisal there is a higher probability that NICE is undertaken for the same drug in other countries. Furthermore, when NICE has published a negative decision, the tendency of not recommending the drug by another HTA body is much larger after than before NICE’s decision.

CONCLUSIONS: Issues encountered in the collection of information made it difficult to quantify the effect of NICE recommendations on HTA decisions in other countries. The results suggest that the selected agencies are considering NICE decisions as a factor for rejecting or restricting the use of drugs in which other case would be recommended or reimbursed.

HEALTH CARE USE & POLICY STUDIES – Health Care Costs & Management

PHP87
COMPLICATIONS, COSTS AND RESOURCE UTILIZATION IN REAL-WORLD COMPLEX ABDOMINAL WALL RECONSTRUCTION PATIENTS

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OBJECTIVES: Little information is available on complication-related resource utilization costs related to patients who have undergone complex abdominal wall reconstruction. Under pay-for-performance requirements financial decision-makers need better information to allocate health care resources and budget dollars. This analysis reports complication-related resource utilization and costs over time in a real-world patient population undergoing complex abdominal wall reconstruction.

METHODS: A cohort of patients with complex abdominal wall reconstructions during inpatient stays between 1/1/08 and 6/30/11 (index event) were followed for 12 months. Related complications, readmissions, costs for facility-based care and related costs were evaluated for 30-60-90-365 days after discharge. Insurance claims from the Truven Health