

sion, and 35% of them prefer to perform nutrition assessment during hospitalization. **CONCLUSIONS:** Inappropriate nutrition care from healthcare providers was possibly due to the lack of appropriate guidelines and insufficient knowledge. Special nutrition management trainings and continuing professional development (CPD) courses will be of great help to improve KAP of healthcare providers towards nutrition.

#### PHP167

##### TRENDS IN USE OF HEALTH ECONOMIC EVIDENCE FOR DEVELOPING CLINICAL GUIDELINES

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**OBJECTIVES:** The recent reforms and policy changes have increased the cost pressures on all healthcare stakeholders, including clinical experts. In the past, clinical guidelines were developed independent of cost or economic considerations. However, increasingly, more clinical guidelines are mentioning cost concerns and referring to economic data in new recommendations. The objective of this study was to analyze trends in the use of health economic information for developing clinical guidelines. **METHODS:** A systematic literature search was undertaken for the databases Pubmed, Embase, Biosis, Google Scholar, and Cochrane. The guidelines published between 2003-2012 were included. For guidelines which met the search criteria, data was collected for the name of the authors, indication, year of publication, country/region, and context of use of cost/economic evidence. **RESULTS:** Sixteen clinical guidelines published between 2003-2014 met the inclusion criteria for specific mention of cost/economic evidence. More than 50% of these guidelines were published between 2006-2014. For indication, 3 out of 16 guidelines were for diabetes, while the rest were for different indications. In these 16 guidelines "cost effectiveness" was mentioned 14 times, either referencing cost-effectiveness data or to mention the importance of such data for selecting treatment options. The guidelines commonly cite high cost of disease or high economic burden as one of the considerations for developing new recommendations (11 out of 16). Another term that was commonly used by these guidelines was "cost-benefit," which was mentioned 5 times in these guidelines. Notably, QALY was rarely mentioned (1 out of 16 times) in these guidelines. **CONCLUSIONS:** This analysis suggests that some clinical experts groups are increasingly showing willingness to use and incorporate health economic information for developing new recommendations. Findings from this study might aid drug and device manufacturers in understanding the context of use of such information and allow them to tailor their product development plans for generating such evidence.

#### HEALTH CARE USE & POLICY STUDIES – Quality of Care

#### PHP168

##### EFFECTIVENESS OF INTERVENTIONS FOR DRUG PRESCRIBING IMPROVEMENT IN PRIMARY HEALTH CARE

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**OBJECTIVES:** To determine effectiveness of interventions for drug prescribing improvement in primary health care units. **METHODS:** Systematic review and meta-analysis. Was held a quest in MedLine@, ScienceDirect@, Springer@, Scielo@, Dialnet@, RedALyC@ and Imbiomed@, since indexation date of each database until August 2014. Were utilized keywords "drug prescribing", "intervention studies" and "primary health care" with their synonyms. Were included quantitative studies, experimental and quasi-experimental, wrote in Spanish, English or Portuguese, and published in any country, with CASP-score equal or major than five, where drug-prescribing quality was evaluated accord to physicians' adherence to drug posology and Mexican guidelines for diseases treatment. Were excluded studies without raw data, qualitative studies, systematic reviews, protocols, essays, government documents, non-pharmacologic or alternative treatment studies and gray literature. Odds ratios (OR) with 95% interval confidence ( $p < 0.05$ ) were obtained. **RESULTS:** Were found 522 publications, were excluded 405 for title, 99 for abstract and 9 for full text. Were included 3 references of the references. Don't found references' citations. Were analyzed 12 articles that reported 17 interventions: 64,7% educative, 23,5% incorporating of degreed in pharmacy to the health team, and 11,8% software utilization. The association forces "intervention/improvement" obtained were: educative interventions OR=2,47 (IC95% 2,28, 2,69), incorporating of degreed in pharmacy to the health team OR=3,28 (IC95% 2,58, 4,18), and software utilization OR=10,16 (IC95% 8,81, 11,71). **CONCLUSIONS:** The software utilization interventions showed major effectiveness for to improve drug prescribing quality, versus educative interventions and incorporation of degreed in pharmacy to the health team. However, educative interventions may have a better cost-benefit relationship.

#### HEALTH CARE USE & POLICY STUDIES – Regulation of Health Care Sector

#### PHP169

##### THE ROLE OF VOLUNTARY HEALTH INSURANCE FUNDS IN SELF-CARE IN HUNGARY

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**OBJECTIVES:** Hungary runs a compulsory, solidarity based health insurance based system with a single payer. However, there is an increasing market of voluntary health insurance schemes and funds. The aim of this study is to analyze the voluntary health insurance market in Hungary. **METHODS:** Our analysis is based on annual data from 2002 to 2013. The analysis of the number of funds and membership figures is based on end of the year data, the analysis of services and payments is based on annual data. We performed time series analysis and calculated dynamic

and intensity relative numbers. **RESULTS:** In 2002, a total of 151,220 members were registered in 35 funds, increasing to 1,033,615 members in 31 funds by 2013. The total revenue of the health funds was HUF 6.699 billion in 2002, HUF 35.097 billion in 2007, and HUF 50.923 billion in 2013. The distribution of health fund payments as a percentage of consumption showed: in 2007, 88.4% supplementary health insurance services, including 16% supplementary services within the framework of social security benefits, 77% self-care services provided by the health funds (67.1% medicine, 31.2% medical device), while in 2013, 98.2% supplementary health insurance services, including 18.6% supplementary services within the framework of social security benefits, 80.7% self-care services provided by the health funds (71.2% medicine, 28% medical device). Health fund payments for lifestyle improvement services reached 11.6% in 2007, and 1.5% in 2013. **CONCLUSIONS:** Reduction in the number of health funds, and an increase both in membership and revenues indicate the consolidation of the function of health funds. The distribution of payments by consumption shows no significant progress: medicine and medical device still play a major role, and disease prevention and health care services still represent a very small proportion.

#### PHP170

##### WHEN CAN PHARMACEUTICAL COMPANIES COMMUNICATE HEALTH ECONOMIC CLAIMS TO PAYERS? 10 CASE STUDIES

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**OBJECTIVES:** In the United States, Section 114 of the Food and Drug Modernization Act of 1997 (FDAMA) governs pharmaceutical companies' promotion of health economic information to payers. Research shows that while payers frequently seek cost-effectiveness information, drug companies may hesitate to promote it because the law is unclear. The Food and Drug Administration (FDA) has not offered further guidance, although it suggested that it plans to publish draft guidance in 2015. We developed hypothetical case studies of promotional claims and explored key questions about whether the FDA would allow them under Section 114. **METHODS:** We created ten categories of potential claims: 1) Costing out on-label clinical endpoints, 2) Promotion of a costing exercise to physicians working in an accountable care organization settings, 3) Burden of illness claims, 4) Economic analyses of a formulary restriction policy, 5) Extrapolations to doses, populations, or settings not covered in trials, 6) Adherence claims, 7) "Utilization of care" as a secondary endpoint in randomized clinical trials, 8) Costing out a competitor drug's adverse event, 9) Economic analysis of comparative effectiveness claims using an indirect treatment comparison, and 10) Extrapolating from surrogate to long-term outcomes in an economic model. We developed a case study for each. We sought to balance examples across diseases and to address the components of Section 114: information type, connection to labeled indication, audience, and evidence quality. **RESULTS:** Most cases fall into a "gray area" as to whether they are allowable under Section 114. In particular, there is a lack of clarity about whether claims meet requirements that they be "directly related" to approved indications and supported by "competent and reliable scientific evidence." **CONCLUSIONS:** This study reinforces the need for further guidance and/or legislation to clarify and possibly expand the Section. It also illustrates challenges the FDA faces in regulating this area.

#### PHP171

##### IMPLEMENTATION OF NICE CLINICAL GUIDELINES (CG) – WHAT CAN BE LEARNED FROM A UK CASE STUDY AND HOW TO ENSURE THAT HEALTH SERVICES DO NOT FALL SHORT OF THEIR OBLIGATIONS

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**OBJECTIVES:** There is a perception that the National Institute of Health and Care Excellence (NICE) has struggled to get clinical commissioning groups (CCGs) to follow guidelines. There is a legal obligation to follow NICE technology appraisal guidance (TAG) when these are accompanied by a funding direction; however it has long been considered that this was not the case for Clinical Guidelines (CGs) nor is there any right of appeal in relation to CGs. We seek to demonstrate that CGs could be effectively mandatory unless a reasoned justification is provided. The position is contrasted with respect to guidance from technology appraisals. **METHODS:** Case law and legislation are reviewed to compare the enforceability of general guidelines and health technology appraisal-derived guidance. In particular Regina vs. North Derbyshire Health Authority, ex parte Fisher (1997) (Regina), and the recent decision of Rose vs. Thanet CCG (Rose) are referred to. We review both the CGs and TAGs issued and compare the strength and range of the recommendations. **RESULTS:** The Regina case established that a decision not to follow national policy was only lawful if there was some 'special factor', which 'exceptionally justified departure'. Disagreement with the policy was not enough. Following this, the recent Rose case considered that the CCG was under an implied obligation to give reasons for any general policy not to fund a particular intervention, which suggests that the guidance is effectively mandatory unless there are special grounds. **CONCLUSIONS:** Even if the Rose decision were successfully appealed or distinguishable, CCGs will need to consider special circumstances if they do not wish to implement a CG. Along with financial constraints on health budgets, this creates dilemmas for CCGs including local priority setting. Therefore, as the law stands, exceptional circumstances will need to be identified by CCGs taking a contrary decision to a CG.

#### PHP172

##### IRRATIONAL DRUG USE PATTERN IN HOSPITALS. A WARNING FOR HEALTH CARE SYSTEM

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