anes for ovarian and breast cancer, proton pump inhibitors in the treatment of dyspepsia, glycoprotein IIb/IIIa inhibitors, methylphenidate for hyperactivity in childhood, zanamivir, and rosiglitazone for type II Diabetes Mellitus. The analysis of the evidence shows that the effectiveness of these drugs has been demonstrated in the last 12 years. However, cost-effectiveness evidence has been published for 70% of the drugs with an average delay of 3 years (range 0-10). The cost-effectiveness of those, introduced after 1995 (80% of all included drugs/ drug groups), has been demonstrated using models only, if at all. CONCLUSIONS: Cost-effectiveness evidence is produced with a lag behind the effectiveness evidence. As a result, decision-makers are in a position of awaiting sound evidence while issuing guidance based on current inconclusive research results. The cost to society is discussed, and establishing the cost-effectiveness of new drugs alongside RCTs at an earlier stage of their development is suggested.

PHP2 1

## SINGLE EUROPEAN-LEVEL COST-EFFECTIVENESS ANALYSIS: OVER THE FOURTH HURDLE AND INTO THE DITCH? Hutton J<sup>1</sup>, Nuijten M<sup>2</sup>, Chambers M<sup>1</sup>

<sup>1</sup>MEDTAP International Inc, London, UK, <sup>2</sup>MEDTAP International, Jisp, Netherlands

BACKGROUND: As more European governments require economic data to support reimbursement applications the potential burden of multiple economic evaluations is being seen as a problem by industry. Placing responsibility for cost-effectiveness assessment at the European level using standardised methods has been proposed as a solution. OBJECTIVE: To review the feasibility of a European level cost-effectiveness test for new drugs, from conceptual, practical and political viewpoints. METHODS: The issues are examined first from the theoretical perspective-does a European level economic evaluation have any inherent logic. Secondly, the practical issues of how such an evaluation might be conducted are examined. Could it be based on a phase III clinical trial? The political issues relate to who would regulate the production of such cost-effectiveness data; who would use the data to assist in what decision(s)? Different regulatory models are assessed using the analogy of drug licensing. DISCUSSION: The position generally taken by economists is that a generalised cost-effectiveness result is neither possible nor useful. Differences in the price structures, treatment patterns and provider incentives between systems make generalisations of cost-effectiveness of questionable relevance. How fast will European integration produce a single health market? Moves towards a single European price for each drug are relevant as in the willingness of European states to allow the EU to play a bigger role in health care financing and organisation. Will countries accept each others' assessments or will an EU agency like EMEA be required? CONCLUSIONS:

## Abstracts

Long-term political and economic changes may well create a true European market in which cost-effectiveness at the European level will have meaning and relevance. Meanwhile, individual country health care systems seem more concerned with short-term budget impact when making new drugs available. The pharmaceutical industry should not anticipate a reduction in the overall demand for locally targeted economic information.

## PHP22 PATIENT ADHERENCE TO DRUG THERAPY IN A THREE-TIER COPAYMENT STRUCTURE Hutchison S

AdvancePCS, Scottsdale, AZ, USA

BACKGROUND: The three-tier copayment plan is designed to reduce the cost of pharmacy benefits to the insurer or payer while maintaining patient choice. Because the patient pays a larger portion of the cost of middleand high-tier drugs, some have argued that this plan design may adversely impact patient drug utilization for chronic medications. OBJECTIVE: To determine whether a three-tier copayment structure adversely affects patient drug utilization for middle- and upper-tier drugs for diabetes and depression. METHODS: We conducted a longitudinal, retrospective claims database study using claims data from a national pharmaceutical benefits management company. Claims for two chronic conditions, depression and oral diabetes, were examined for patients on three-tier copayment plans and for patients on an open formulary plan with the same copayment for every drug. Average rates of patient adherence, number of prescriptions filled, and days of therapy were calculated. RESULTS: There were statistically significant differences in rates of patient adherence, number of prescriptions filled, days of therapy, amount of copay, and payer costs among patients using drugs in the lower, middle, or upper tier of the three-tier structure. In addition, average patient adherence, number of prescriptions filled, and days of therapy did differ significantly for patients on an open formulary compared to patients on a three-tier copayment structure. These differences were largely a function of sample size, and may be of little practical utility.CONCLUSIONS: The larger patient copayment for medications in the middle and upper tiers of a three-tier copayment structure have only a minimal impact on drug utilization in the antidepressant and oral diabetes drug categories. Further research is needed to determine whether these findings would be replicated when applied to other therapeutic classes.

PHP23

## DRUG REIMBURSEMENT PROGRAM FOR INDIGENT PATIENTS: AN ECONOMIC IMPACT ON THE HOSPTAL ADMINISTRATION BUDGET Nguyen AB<sup>1</sup>, Arbuckle R<sup>2</sup>, Anderson RW<sup>2</sup>, Sansgiry SS<sup>1</sup>

<sup>1</sup>University of Houston, Houston, TX, USA; <sup>2</sup>The University of Texas MD Anderson Cancer Center, Houston, TX, USA