RESULTS AND CONCLUSION: The conclusions are: (1) it is feasible to use a surrogate sample to estimate regression models that satisfactorily relate patient utility to readily collectible predictor variables; (2) these models can be applied to assign plausible utility scores to subjects in a phase III clinical trial; (3) the resulting ranking of therapies is in accord with clinical findings from the present trial; and (4) this strategy may be especially attractive for cost-utility analyses that pool data from multiple trials.

ADVANCED SENSITIVITY ANALYSIS BY THE INTEGRATION OF POINT-SENSITIVITY AND RANGE-SENSITIVITY USING PROBABILITY DISTRIBUTIONS

Nuijten MJC
The Lewin Group, Hoofddorp, The Netherlands

The level of uncertainty regarding the outcome of a pharmacoeconomic study cannot be covered completely by the statistical methods routinely employed to handle uncertainty in clinical research. Sensitivity analysis is the most common methodology to deal with the extra uncertainty associated with pharmacoeconomics, which has also been incorporated in recent guidelines on health care evaluation. However, the execution of a sensitivity analysis and the interpretation of the results is not yet standardized, which may lead to subjectivity and consequently weakening of the value of economic evaluations. **OBJECTIVE:** The concept of point-sensitivity was used to develop a method which allows a more objective judgment of the robustness of a model by avoiding the subjectiveness in most current economic studies.
RESULTS: However, a limitation of this method is that the sensitivity measurement is based on a uniform distribution of the variables, which may actually have different distributions. A second limitation is that the overall sensitivity measure is based on a subjectively chosen range, excluding the impact of values outside the range on overall sensitivity.
CONCLUSION: The present study presents a refinement of the method by the incorporation of probability distributions, which allow a more accurate assessment of the level of uncertainty in the model. In addition, a bootstrap method is used to create probability distribution for fixed input variables based on a limited number of data points.

DIMINISHING THE COST OF HIGHLY PRESCRIBED DRUGS IN THE COMUNIDAD VALENCIANA (SPAIN)

Larruga J, Diaz R, Garcia J, Moreno R
Conselleria de Sanidad, Generalitat Valenciana, Barcelona, Spain

OBJECTIVES: Our objective is to diminish the cost of a group of highly prescribed drugs in the Comunidad Valenciana (Spain) through the promotion of prescribing

them by drug (generic) name (not registered [brand] names), and the corresponding dispensation at pharmacies of a selected group of registered drugs with the same composition and size and lower price (i.e., reference drugs).
METHODS: The drugs representing about 50% of the drug prescription costs for the Health Service in June 1995 were selected through analysis of pharmacy bills. The most prescribed sizes for each drug were studied in order to select those with minimum prices as reference drugs. An agreement was concluded with pharmacies to dispense these trade names when the prescription was made by drug name. Physicians were informed in order to promote prescription by drug name.
RESULTS: Thirty-four drugs were responsible for 45% of the drug prescription bill of the Health Service in the Comunidad Valenciana in June 1995. The first 10 of them were Omeprazole, Nimodipine, Ciprofloxacin, Enalapril, Calcitonin, Diltiazem, Fluoxetine and Nifedipine. Globally, prescriptions by drug name have increased from 0.2% to 0.34% in 5 months. Prescription of registered names of minimum price has increased markedly for nearly each drug. For example, with Amoxicyllin, prescription of reference drugs in 1995 was 14.62% of the total of Amoxicyllin prescriptions compared with 35.92% in 1996; for Diclofenac, prescriptions of reference drugs represented 15.02% of the total of Diclofenac prescriptions in 1995 compared with 31.85% in 1996.
CONCLUSIONS: The minimum increase in dispensation of prescription by drug names is influenced by the fact that in Spain no generic drugs are available, and so there is a strong tradition of prescribing by registered drug names. The agreement with pharmacies represents the dispensation of a group of selected trade names of minimum prices (reference drugs); physicians have preferred prescribing directly the names included in this group. The effect of diminishing costs has been obtained with this intervention, but not by the increase in prescriptions by drug name, as the impact of this measure in prescribing habits has been slight.

META-ANALYSIS OF ECONOMIC EVALUATIONS: A METHODOLOGICAL APPROACH AND CASE STUDY

Pang F, Drummond M
Centre for Health Economics, University of York, York, UK

Meta-analysis has become an increasingly accepted research tool for producing overviews of the results of clinical studies. Recently, there has been a rapid increase in the number of economic evaluations performed, and there is both the need and the potential to produce overviews for policy makers. **OBJECTIVE:** The purpose of this research was to investigate whether standard meta-analytical approaches (as applied to clinical data) could be applied to economic evaluations. As a case study, an economic meta-analysis (EMA) was conducted of cost-effectiveness analyses involving