valuable especially in comparing options for a given disease, decision makers have struggled in using them to compare the value of alternatives across diseases. For example, Garvey (2000) noted that the CER use of sildenafil in erectile dysfunction was favorable compared with treatments in other diseases, such as renal dialysis and coronary artery-bypass graft surgery in current literature. Garvey concluded that while the CER comparisons were valid on the “local” (condition-specific) comparisons, they are problematic in “global” comparison across diseases. This could be attributed to the failure of CER to account for different degrees of medical necessity, baseline utility, public health importance, and other relevant issues. Manifold theory helps address the issues arising from global versus local properties from a geometric perspective. Manifold theory provides an excellent mathematical model to develop a global, cost-effective based valuation of interventions that can incorporate dimensions, such as medical necessity while preserving the local functionality of useful condition-specific CER comparisons. RESULTS: Examples of two different manifolds derived under different assumptions are presented. The development of the first manifold is derived via theoretical criteria for rational health resource allocation, while the second manifold is based on empirical data that infer “rules at work” in the decision-making coverage for the U.S. Medicare system. Calculations of global valuations for renal dialysis, cholesterol-lowering medication and coronary artery bypass graft surgery are presented and compared to that of sildenafil. CONCLUSIONS: The resultant values, presented side-by-side with published CER’s present a more globally interpretable “valuation”.

**VALUATION OF INFORMAL CARE: THE OPPORTUNITY COST METHOD APPLIED IN CAREGIVING FOR STROKE AND RHEUMATOID ARTHRITIS PATIENTS**

*Van den Berg B1, Brouwer W2, Van Exel J3, Koopmanschap M4*

1 Erasmus University and National Institute for Public Health and the Environment, Rotterdam, Netherlands; 2 Erasmus University, Rotterdam, Netherlands

**OBJECTIVES:** Informal care, defined as care provided by family members or friends, plays a substantial role in the total care provided to patients with chronic and terminal diseases. It should be incorporated in any economic evaluation adopting the societal perspective. In practice, however, informal care is often neglected. Time is a substantial part of informal care. The time spent on caring should be valued to incorporate it in economic evaluations. It is recommended to value informal care time with the opportunity cost method. We discuss the practical problems of the application of the opportunity cost method in caregiving for stroke and rheumatoid arthritis patients. **METHODS:** The data for this study are collected by mailed surveys to 217 informal caregivers of stroke patients and to 153 informal caregivers of rheumatoid arthritis patients. **RESULTS:** We distinguished three types of forgone time: paid work, unpaid work and leisure. Informal care is usually at the cost of leisure (60 percent). In stroke however it is also for a major part at the cost of unpaid work (36 percent). The total amount of time forgone is in both populations approximately 5 hours a week of unpaid work and in case of stroke more than 10 hours a week of paid work. The leisure time forgone in rheumatoid arthritis is twice the leisure time forgone in stroke. It is worth noting that we developed a new instrument to measure the opportunity costs of informal care to rheumatoid arthritis. **CONCLUSIONS:** Rheumatoid arthritis is an inflammatory progressive chronic disease without a clear reference point. A reference point means that there is a clear period before the incidence of the illness and a clear period after the incidence. This lack of a reference point has important implications for the measurement of time forgone in order to be able to provide informal care.

**TRENDS IN DATA SOURCES USED FOR ECONOMIC EVALUATION**

*Boler A*

Heron Evidence Development, Stevenage, United Kingdom

**OBJECTIVES:** The suitability and the practicality of using different data sources in economic evaluation have been well documented. The objective of this study was to identify any trends in the types of data sources used in these studies over a 6-year period (1995–2000) **METHODS:** For this preliminary study, the area of heart disease was selected to create a sample of papers for analysis. A simple search strategy was constructed and run on the NHS EED database. The retrieved studies were then sorted by year and type of economic evaluation. The sources of data used to estimate effectiveness, resource use and costs for the interventions or programmes in the studies were then identified for each study. **RESULTS:** The literature search retrieved 326 economic evaluations published between 1995 and 2000. Data used in the evaluations ranged from solely expert opinion to pragmatic trials where cost and resource use information were collected alongside one another. There is a downward trend in the proportion of studies using a retrospective analysis to establish the effectiveness of interventions and programmes. A review of the literature (with no meta-analysis) has remained a constant data source for effectiveness, accounting for approximately a quarter of all evaluations each year. The type of resource utilisation data used has not changed over the years, with the majority of information collected alongside trials, with either the whole study population or with smaller cohorts, or a retrospective analysis of case notes. The
documentation of cost data sources has improved over the six years, and the use of previously published data has decreased also. CONCLUSIONS: This preliminary study reveals definite trends in the different data sources used in economic evaluation over this six-year period. Whether these trends can be seen regardless of disease area and type of intervention remains to be investigated.

PMD9

BEHAVIOURAL ECONOMICS: THE IMPORTANCE OF ABSOLUTE AND RELATIVE HEALTH OUTCOMES

Van Exel J, Brouwer WBF
Erasmus University, Rotterdam, Netherlands

OBJECTIVES: In a paper in the Journal of Health Economics, Victor Fuchs (2000) stated that one of the main research tasks for health economists is to enhance our understanding of economic behaviour. One of the areas that are especially important for health economics as a behavioural science is that, contrary to traditionally assumed, people appear to be more concerned about relative than absolute levels of outcomes. METHODS: First of all, in surveys of the relation between income and wealth it was found that people take the behaviour and wealth of relevant others as reference and, by the desire to “live up to the Joneses”, adapt their preferences according to this norm (i.e., “reference drift”). In addition, this “wealth” norm is affected by habituation to the status quo individuals have already achieved. Each time an aspiration level is reached, the norm is raised (i.e., “preference drift” or “adaptive preferences”). Is the same true for health? Do people relate their health state, right to health and health care to what is viewed as “normal” or is possible in view of relevant others’ health? RESULTS: Results from two surveys undertaken among people from the general public (n = 220 & n = 394) demonstrate that people adapt their expectations of length and future quality of life to own health behaviour relative to that of others and to age and health status of close relatives. CONCLUSION: Therefore, after JS Mill, people do not only desire to be healthy, but also as healthy as others.

PMD10

ISPOR QUALITY OF LIFE SPECIAL INTEREST GROUP TRANSLATION AND CULTURAL ADAPTATION: PROGRESS ON THE DEVELOPMENT OF PRINCIPLES OF BEST PRACTICE

Wild DJ, Grove A, Martin ML, Vance M, Eremenco S

OBJECTIVES: A series of quality of life special interest groups were set up by ISPOR in 1999 in order to stimulate discussion and contribute to the advancement of science. The translation and cultural adaptation group has met four times and has been working towards the development of a set of principles of best practice. METHODS: The approach reviews and builds upon current practice, taking account of existing guidelines and theoretical perspectives. These diverse perspectives have been evaluated with regard to the issues and challenges facing industry and the broader outcomes research community. This approach seeks to be inclusive, taking into account the views of practitioners, academics, and users of health outcome measures. This first stage has resulted in an interim report describing the broadly agreed principles of best practice. The next step will involve broad consultation with practitioners, academics and users in order to refine and develop the interim report. This report will set out objectives and principles and identify examples of best practice illustrated through a series of exemplary case studies. RESULTS: The initial draft of the paper is based upon a synthesis of methodological approaches, common nomenclature, and quality-control assurance requirements used by the range of organizations. The interim report provides both methods and rationale for an expansive list of situations that are now encountered with regularity. It also includes special protocols for a variety of unique considerations that have arisen for translation/adaptation work that is sensitive to expanding needs and challenges of outcomes research in ever-expanding global applications. CONCLUSION: This interim report provides a wealth of information and guidance for Best Practice Principles in Cross-Cultural Translation/Adaptation work. It is hoped that the presentation at this meeting will provide the starting point for the broader review so that a complete range of perspectives can be taken into account.

A DALY IS A QALY—OR IS IT?

Essink-Bot ML, Kruijshaar ME, Bonsel Gj
1Erasmus Medical College, University of Rotterdam, Rotterdam, Netherlands; 2Academic Medical Center, Amsterdam, Netherlands

OBJECTIVE: Health economists developed QALYs in the 1970s as an outcome measure combining duration and quality of life, primarily for use in cost-effectiveness studies. The concept of the DALY, as developed for the Global Burden of Disease (GBD) 1990 study, closely resembled the QALY. We identified the analogies and disparities of QALYs and DALYs from the literature and our own empirical experience with both approaches (EQ-5D, Dutch Disability Weights study). METHODS: The DALY is a gap measure, defining health loss from some predefined standard, whereas QALYs quantify health gains. The general approach to derive QALY values includes empirical valuation of generic health state descriptions,