set appears reasonably valid for research, particularly focusing on accreditation. The dataset may be a suitable alternative to collecting data from primary sources, although caution should be exercised with earlier data. Further work is ongoing to establish the nature of the missing data and the implications for cost differences.

**PRA27**

**CAN USING A RESOURCE USE LOG IN AN ECONOMIC EVALUATION ALONGSIDE A RANDOMISED CONTROLLED TRIAL REDUCE THE AMOUNT OF RECALL BIAS?**

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**OBJECTIVES:** To determine whether giving patients a resource use log (RUL) at hospital discharge reduces recall bias in a follow-up resource use questionnaire (RUQ). **METHODS:** Within the APEX randomised controlled trials (RCTs) 86 patients undergoing joint replacement were randomised to receive or not receive an RUL at hospital discharge (The RUL trial). A postal RUQ was then administered to all participants. In the second arm of the surgery research arm (with regards to having a GP home visit (Kappa = 0.173) and prescriptions (CCC = 0.581 vs. 0.0161). There was some slight evidence in favour of the non-RUL arm with regards to having a GP home visit (Kappa = 0.335 vs. -0.0937). The RUL arm showed no agreement better than the non-RUL arm between data sources in terms of number of visits to GPs (CCC = 0.581 vs. -0.0161). GP telephone calls (CCC = 0.564 vs. 0.173) and prescriptions (CCC = 0.418 vs. 0.13). **CONCLUSIONS:** At the time of the RUQ, our study found some evidence that provision of an RUL reduces recall bias in relation to visits to GPs.

**PRA28**

**SYSTEMATIC REVIEW AND CRITIQUE OF HEALTH ECONOMIC MODELS ON RELAPASING-REMITTENT MULTIPLE SCLEROSIS IN THE UK**

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**OBJECTIVES:** Several new disease modifying therapies have recently received marketing authorisations for the treatment of relapsing-remitting multiple sclerosis (RRMS). Selection of the most appropriate model was made in each instance. The objective of the study was to systematically review and critically evaluate the techniques used in modelling relapsing-remitting multiple sclerosis in the UK. **METHODS:** Embase, Medline, Cochrane Library and the NICE website were searched systematically on 03.03.14 to identify articles relating to cost-effectiveness models in RRMS with a UK perspective. Data sources, techniques and assumptions of the included models were extracted, compared and critically evaluated. **RESULTS:** Of 385 search results, 25 full texts were evaluated and 17 articles (relating to 12 different models) were included. Early models varied considerably in method and structure but convergence was apparent over time towards a Markov model with states on disability score, a 1-year cycle length and a lifetime time horizon. The most recent models also allowed for modeling treatment sequencing and different assumptions around efficacy waning and treatment failures. Additional model assumptions were sometimes implemented inappropriately. Confidential data sources were frequently used, especially within the models submitted to NICE. **CONCLUSIONS:** Despite a convergence over recent years to a similar Markov structure, there are still significant discrepancies between the models simulating the course of RRMS in the UK. Differing methods, assumptions and data sources make the comparison of models, and their results, problematic. The Markov structure commonly used also lead to problems such as an incapability to deal with heterogeneous populations and multiplying complexity with treatment sequences; these would best be solved by using alternative model types such as discrete event simulations.

**PRA29**

**SHOULD CHANGES IN DRUG PRICE OVER TIME BE CONSIDERED IN COST-EFFECTIVENESS ANALYSES?**

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**OBJECTIVES:** Cost-effectiveness analyses (CEA) are used to support funding decisions for new drugs by comparing their clinical and economic benefits. As prices of drugs may fall over time due to market competition, entrance of generic drugs or negotiated price cuts, this is rarely accounted for in CEA. The objective is to review recent primary cost-effectiveness analyses for CEAs in the UK and by year thereafter. While experts were not aware of any existing guidelines, the predominant view was that although using the brand price for the studied drug would be a conservative approach, it is reasonable to account for price reductions after patent expiration for all drugs considered. **CONCLUSIONS:** Drug price variations introduce a source of uncertainty in CEA, and a reliable and level of generic drug pricing are unknown. There is currently no consensus on how this should be considered. Failure to incorporate generic drug entry in CEA is likely to yield overestimates of ICER for treatments used over long-term.

**PRA30**

**ESTIMATING COSTS IN A COST-EFFECTIVENESS ANALYSIS: ADHERENCE TO HTA GUIDELINES**

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**OBJECTIVES:** The aim of this systematic review was to establish the nature of the missing data and the implications for cost differences. In France, it is possible to include a variable for the cost of days in hospital but not for hospital admissions. This variable costs are selected for difference disease-related outcomes a systematic approach should be used to derive these estimates as suggested in HTA guidance. To determine the extent to which a systematic approach was used for estimating the cost data used in published CEAs and a rationale for selecting the costs is generally not provided.

**PRA31**

**IDNETIFYING THE BROADER VALUE OF VACCINES IN LOW AND MIDDLE INCOME COUNTRIES**

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**OBJECTIVES:** Current economic evaluations of vaccine immunization strategies only concentrate on immediate health gains (measured in metrics such as QALYs or DALYs) and household cost savings. Vaccine immunization strategies, however, often take place within a broader societal context. In order to financially sustain these strategies, economic evaluations should not only encompass immediate health gains but also include the broader societal benefits of ‘vaccines’. This study aims to identify the relevance of information with regard to the broader value of vaccines for decision makers in low and middle income countries. The objective of the study was to identify the broader societal benefits of vaccines including a literature review, a survey, interviews and consultations with experts. The long-term effects of those who were vaccinated and the effects experienced by society as a whole were compared to non-vaccinated community members. In total, 223 articles were included in a framework. **RESULTS:** In total, 223 articles were included in a framework. In five different domains were identified. The first domain included long-term productivity gains. These gains refer to the individual long-term productivity due to better physical and mental health as well as the economic consequences of decisions made by households due to improved child survival. The second domain consists of ecological values which are related to the decline of prevalence and incidence of vaccine related diseases. The third domain encompasses different types of equity considerations. The fourth domain includes the impact of vaccine strategies on other health interventions. Finally, the fifth domain includes macro-economic effects, such as the impact of vaccine immunization strategies on GDP tax revenues and overall government savings. **CONCLUSIONS:** Several broader economic values outside the healthcare sector were identified. These results provide the input for the incorporation of these values in economic evaluations. Further research is needed to identify the most important broader values for national decision makers.

**PRA32**

**PROPOSAL FOR A COMPREHENSIVE DEFINITION OF BUDGET IMPACT ANALYSIS**

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**OBJECTIVES:** A number of articles BIA is often defined as what it does. Some authors have tried to define it by comparing to it cost effectiveness analysis. But still there is no common stand-alone definition of the term Budget Impact Analysis (BIA). Our aim is to provide such a definition. **METHODS:** In the course of a PhD thesis we conducted a systematic literature review in order to identify methodological articles regarding budget impact analyses. We searched PubMed and other databases to identify relevant articles. From the eligible articles the different understandings of budget impact analyses were extracted. In a second step we developed a comprehensive definition. **RESULTS:** Our search delivered 223 articles from which 28 met our inclusion criteria. 15 different approaches to describe BIA were identified. Over the course of [2010 to today] there was a constant improvement and increase of complexity in the descriptions. Nevertheless most of the definitions are based on the work of dynamic incremental cost-effectiveness ratio (ICER), at the time of market entry and by year thereafter. While experts were not aware of any existing guidelines, the predominant view was that although using the brand price for the studied drug would be a conservative approach, it is reasonable to account for price reductions after patent expiration for all drugs considered. **CONCLUSIONS:** Drug price variations introduce a source of uncertainty in CEA, and a reliable and level of generic drug pricing are unknown. There is currently no consensus on how this should be considered. Failure to incorporate generic drug entry in CEA is likely to yield overestimates of ICER for treatments used over long-term.