and nearly half originated from north America (31/69). Emerging themes suggest that better accuracy is achieved when patients are answering questions about inpatient and specialist care. **CONCLUSIONS:** There is only a limited amount of validity and reliability information available to inform best practice for resource-use measurement in clinical trials. This ongoing review will identify the gaps, giving a clearer view of where research efforts should be concentrated.

PRM30

FUTURE COSTS INCLUSION IN PUBLISHED ECONOMIC EVALUATIONS: WHAT IS THE CURRENT SITUATION?

Gros B[1], Soto J[2], Casado MA[1]

[1]*Pharmacoeconomics & Outcomes Research Iberia, Madrid, Spain,* [2]*Carlos III University of Madrid, Madrid, Spain*

OBJECTIVES: Nowadays, there is a general agreement about the need of including future related medical costs in life years gained while no consensus has been achieved about future unrelated medical costs (indirect medical costs) and future non-medical costs. The aim of this study has been to assess the extension of published economic evaluations that incorporated future costs and what types of future cost were included. **METHODS:** Three general health economic journals (*Pharmacoeconomics, Value in Health and European Journal of Health Economics*) were reviewed to identify economic evaluations from 2008 to 2011. Only complete economic evaluations were accepted for this research. From each selected article, future cost inclusion was evaluated along with the type of future costs included. **RESULTS:** A total of 148 articles were founded from the three journals fulfilling the inclusion criteria; 67 of them (45.27 %) incorporated future related medical costs, 9 (6.08 %) included also future unrelated medical costs and none included future non-medical costs. Percentage of articles including future costs increased from 2008 (33 %) to 2011(57 %) and no differences were detected between the three journals in the proportion of economic evaluations incorporating future costs. **CONCLUSIONS:** Despite most of health economic guidelines advice the need of incorporating future costs in l economic evaluations, less than the half of articles reviewed incorporated them. Moreover, the inclusion of future unrelated medical costs and future non-medical costs was much lower. Results of economic evaluations can change dramatically depending on future costs inclusion. It is necessary to change the current practice and systematically include future related medical costs in the base case of economic evaluations and future unrelated medical costs and future non medical costs at least in sensitivity analysis.

PRM31

CHALLENGES OF CONDUCTING ECONOMIC EVALUATIONS USING LINKED ELECTRONIC HEALTH RECORDS - CPRD AND HES IN THE UNITED KINGDOM

Asaria M[1], Walker S[1], Sculpher MJ[2], Palmer S[1], Manca A[3], Abrams KR[4], Hemingway H[5], Denaxas S[5], Morley KI[5], Shah A[5], Timmis A[6], Gale C[7]

[1]*University of York, York, UK,* [2]*Centre for Health Economics, York, UK,* [3]*University of York, Heslington, UK,* [4]*The Institute of Cancer Research, Sutton, UK,* [5]*UCL, London, UK,* [6]*Barts and the London School of Medicine and Dentistry,, London, UK,* [7]*Leeds University, Leeds, UK*

OBJECTIVES: A range of linked electronic health records (LEHR) datasets are becoming available in the NHS in England. Understanding the benefits such large LEHR datasets can offer when performing cost-effectiveness analysis and overcoming the challenges inherent in utilising such datasets using as a case study: the CALIBER (Cardiovascular Disease Research using Linked Bespoke Studies and Electronic Records) dataset to assess the cost-effectiveness of treatment of patients with chronic stable angina. **METHODS:** The CALIBER dataset links primary care data from CPRD with secondary care data from HES, mortality data from ONS and disease-specific data from MINAP. This dataset is used to provide a generalisable baseline for cost-effectiveness models and to provide effectiveness estimates for treatments observed in the dataset. It is also used to explore decisions that, due to ethical concerns, could not be researched through RCTs - for example, optimal durations and combinations of treatments used in current practice. The statistical methods of matching, differences in differences and instrumental variables are used to overcome the selection bias problems associated with inferring treatment effects using observational data. The models are also combined with RCT results for novel treatments to assess their cost-effectiveness in a real world as opposed to trial setting. **RESULTS:** There were significant challenges involved in working with LEHR ranging from correctly linking the data to plausibly imputing missing data and correcting for selection bias in estimates. Having addressed these challenges we were left with a rich dataset, from which to estimate costs, risks of health events and treatment effects in a generalisable real world setting. **CONCLUSIONS:** While the selection biases associated with the use of LEHR within the NHS makes them challenging to work with, the large sample sizes, generalisability of the results and relatively low cost of the research makes them a hugely valuable resource for economic evaluation.

PRM32

DEVELOPMENT OF THE SCHARR HUD (HEALTH UTILITIES DATABASE)

Rees A, Paisley S, Brazier J, Cantrell A, Poku E, Williams K

University of Sheffield, Sheffield, UK

OBJECTIVES: The retrieval of studies containing evidence of health state utility values (HSUVs) is currently problematic using generic bibliographic databases such as Medline. This is due to a lack of standardised search vocabulary and inadequate and inconsistent indexing. The objective of this project is to develop a bibliographic database providing access to details of research studies containing health state utility values generated using the EQ-5D and other preference-based instruments. **METHODS:** The initial phase of the project has focussed on the EQ-5D. An alpha version of the database was created using Mendeley reference management software. A corpus of potentially relevant studies was identified by searching Medline and by sifting the reference lists of systematic reviews of HSUVs in a range of diseases and conditions. The sifting of retrieved studies is an ongoing process. Studies are included in the database if they contain estimates of HSUVs. The names of instruments used in the studies, including and in addition to the EQ-5D, are extracted and added to the database record to create a searchable index of instruments. A beta version of the database, using bespoke software to improve functionality, is currently undergoing ad hoc testing. **RESULTS:** The alpha version of the database contains over 3,500 potentially relevant studies identified by the search process. Several hundred studies have been data extracted and indexed. The names of over 50 instruments, including quality of life, disease specific and generic preference-based measures have been added to the index. A programme of sifting, data extraction and indexing is ongoing. Public access to the beta version of the database is planned for Autumn 2013. **CONCLUSIONS:** The purpose of the health utilities database is to improve access to HSUV evidence, in the first instance in studies using the EQ-5D with a view to including all major preference-based utility measures.

PRM33

THE REVIEW OF PUBLICATIONS OF PHARMACOECONOMIC RESEARCH IN RUSSIA DURING 2007-2012

Yagudina R[1], Kulikov A[1], Mirkasimova G[1], Litvinenko M[2]

[1]*I.M. Sechenov First Moscow State Medical University, Moscow, Russia,* [2]*First Moscow State Medical University named after I. M. Sechenov, Moscow, Russia*

OBJECTIVES: To analyze the publications on methodology and normative regulations of pharmacoeconomic studies, including materials providing results of conducted researches in Russia or translated international publications, as well as to analysis the dynamics of publications and identify the structure of methodological approaches in Russia. **METHODS:** The screening of publications from the data of the Central Medical Scientific Library of the First MSMU was conducted based on the key words - "pharmacoeconomic*" and "pharmacoeconomical*" with corresponding endings. The time horizon of the study was 6 years (from 2007-2012). **RESULTS:** By the beginning of 2013, 280 literature sources were found and analyzed in the timeline from 2007 to 2013. It was found that the most common type of publications for the reporting period have been the inaugural dissertations showing the researches results - they are accounted for about 47% of all studies, followed by further research reports, accounted for 44%, methodical publications - 5%, dissertations devoted to the methodology of the pharmacoeconomics- 3%, regulatory guidance documents and translations of foreign studies - 1%. The most common structure of published researches was monocenter (56%), with a retrospective time-restricted directivity (74%). Russian authors use the methodology of the "cost-effectiveness" analyzing in their works the most frequently (48%). 64% of Russian researchers take into account only direct costs, 32% of researchers analyze their studies based on indirect costs. **CONCLUSIONS:** Based on our review of the published works from 2007 to 2012, we can make a conclusion on the formation and development of high-grade pharmacoeconomics as an independent research area in the Russian Federation.

PRM34

EVALUATING DIFFERENT MODES OF RADIOTHERAPY BASED ON A PATIENT-LEVEL SIMULATION MODEL

Quik EH[1], Feenstra TL[1], Postmus D[1], Krabbe PFM[1], Langendijk H[2]

[1]*University of Groningen, University Medical Center Groningen, Groningen, The Netherlands,* [2]*UMCG, Groningen, The Netherlands*

OBJECTIVES: Use of proton instead of photon radiation therapy for head and neck cancer reduces the primary tumor and damage to adjacent organs risk, which results in fewer complications. These complications decrease quality of life (QOL). To support better decision making concerning which patients benefit most from proton therapy, a patient-level simulation model is developed and applied to compare outcomes. **METHODS:** Model estimates, such as patient and tumor characteristics, follow-up time, and survival, were based on patient-level data containing patients treated with radiation therapy as first line therapy for head and neck tumor in The Netherlands between 1980–2010 at the UMC Groningen (n=277) and VU Amsterdam (n=736). In silico radiation treatment planning schemes for both proton and photon therapy allowed to compare a priori expected health benefits and cost consequences for both therapy modes to support a patient tailored choice. **RESULTS:** Patients experienced their first event at a median time of 30 (0-270, SD 34) months' time. Loco-regional recurrency in 29%, distant metastasis in 4.2%, both combined in 1% and dead in 13.3% of patients. Cost per year for photon was estimated €15000, proton €30000, disease free state €190, local regional recurrence €28000, metastases €35000, and both €35000. For the complication sticky saliva costs per year of an average patient were €31, xerostomia €194, dysphagia €57, tube feeding €4262, and hypothyroidism € 117. Proton radiation therapy leads to less complications and improved QOL. **CONCLUSIONS:** Given the high costs of proton therapy, this was found not to be cost-effective compared to best photon therapy in an average patient with head and neck cancer. However, the outcomes vary substantially between patients. Depending on patient and tumor characteristics for selected patients with high complication risks, proton therapy can be a better option.

PRM35

THE ECONOMIC FOOTPRINT OF THE GREEK PHARMACEUTICAL INDUSTRY

Tserkezis E, Paratsiokas N, Tsakanikas A, Athanasiadis A

Foundation for Economic & Industrial Research (IOBE), Athens, Greece

OBJECTIVES: To assess the overall impact of the production and distribution of pharmaceutical products in the Greek economy, in terms of Value Added, GDP, employment and tax revenues. **METHODS:** The overall impact in the Greek economy is estimated as an exogenous change in the economic activity by using the Leontief input-output model. **RESULTS:** The results indicate that the direct effect of the industry on domestic economic activity is €1.5 billion in terms of GDP. The indirect effect, which represents the value created by auxiliary sectors as (main suppliers) of the pharma industry is €2.2 billion. Finally, the induced effect, which is the impact from the final consumption, as a result of the wages and salaries gained by employees across the production chain of the specific industry is €3.8 billion. Hence, the overall effect on GDP is approximately €7.5 billion, which repre-