various methods for adjusting confounders in estimating comparative effective-ness. However, the PRISMA literature review in PubMed was conducted to identify published articles with the key words such as propensity score, instrumental variable analysis, inverse probability, Propensity Instrumental, Propensity Inverse probability, machine learning, support vector machine, CART (Classification And Regression Tree) and decision tree. This was performed by comparing proportions of methods before 2008 and after 2008. RESULTS: 5021 articles were found with the key word of comparative effectiveness. 227 articles had the key word of propensity. 56 articles had the key word of instrumental. 29 articles had the key word of inverse probability. 20 articles had key words of both propensity and instrumental. 12 articles had key words of both propensity and inverse probability. 6 articles had key word of machine learning. 6 articles had key word of CART. No article was found to have the key word of support vector machine. Overall 6.2% of articles had one of the key words, indicating usage of confounder adjustment methods in comparative effectiveness research. Two articles had three key words of propensity, inverse probability and instrumental. Based on Chi-square test, significant increase of usage of P-value < .05 in past has been observed. CONCLUSIONS: Based on search result, significant increase in usage of confounder adjustment methods was observed since 2008. In a few articles, results from a few instrumental variable analy- sis were identified by employing various methods for adjustment of confounders. Also application of machine learning methods is recommended to find stable estimates of models used, especially to adjust for time dependent confounders.

PRM11 EVALUATING CONTENT VALIDITY OF PERFORMANCE OUTCOMES (PERFOS): ENSURING THE PATIENT-RELEVANCE OF THREE PERFOS IN ELECTIVE TOTAL HIP REPLACEMENT (ETHR)

Ballinger RS1, Kerr C2, Bush EN3

1CONCord Health Economics, UK, 2University of Hull, UK, 3York Hospital, NY, USA

OBJECTIVES: Performance Outcomes (PERfOs) measure tasks performed by a patient under the instruction of a health-care professional. PERfOs use support for reporting adverse events. This study explored patient experience and relevance of three elective total hip replacement (ETHR) PERfOs: the timed up and go (TUG), four step stair climb (4SC) and long stair climb (LSC). METHODS: Eight recent eTHR patients in the US were interviewed by telephone on completing three PERfOs. Participants described their experience of completing the PERfOs; and how the movements, speed and level of difficulty corresponded to activities in their everyday lives. Interviews were audio-recorded, transcribed and systematically coded. Saturation was assessed by tabulated patient summaries from which new elements reported in each interview were identified. RESULTS: The sample comprised six females and two males, with mean age 67 years. All participants related TUG movements to activities in their daily lives. The four step stair climb (4SC) and long stair climb (LSC) were not identified. Seven of the eight were able to identify the more challenging PERfO (LSC). CONCLUSIONS: Patients' experience and perceptions of the PERfOs were positively correlated with their relevance to daily activities in the eTHR patient population.

PRM12 CLINICAL TRIALS REGISTRIES FOR SYSTEMATIC REVIEWS – AN ALTERNATIVE SOURCE FOR UNPUBLISHED DATA

Halfmoon NJ, Thompson JC, Quigley JM, Scott DA

ICON Health Economics, Oxford, UK

OBJECTIVES: When conducting a systematic review it is common practice to search for peer-reviewed publications and conference proceedings to identify studies relevant to a research question. However, information about studies is increasingly available through other sources and can be of importance in systematic reviews. Clinical trials registries (CTRs) are one of the most commonly used CTRs and provides search facilities that enable the identification of trials through common search terms. In addition, there is the potential to request information from study sponsors through clinicaltrialsdatabase.net. This website is supported by several prominent study sponsors and allows reviewers to request access to unpublished data which may be of importance in a systematic review. METHODS: We searched clinicaltrialsdatabase.net for trials on knee and hip OA and additional search results are provided in a recent SR. The results of the search on knee OA are reported in an ongoing SR. We report results from our search on knee OA. RESULTS: Our search on knee OA retrieved 405 unique trials. We excluded 237 trials which were not relevant for our clinical question. An additional 107 trials were excluded due to lack of publicly available registration information. 61 trials were excluded due to lack of relevant endpoints. 13 trials were excluded due to lack of CONSORT data. 8 trials were not relevant after we removed duplicates. 5 trials were excluded due to lack of a trial. 2 trials were excluded due to lack of access to the full-text. 4 trials were excluded due to lack of data. The search resulted in 15 trials meeting our inclusion criteria. CONCLUSIONS: Although the search results are preliminary, clinicaltrialsdatabase.net may provide an alternative source of unpublished data for clinicians and systematic reviewers.

PRM13 COMBINING MCMC WITH ADVANCED STATISTICS TO TACKLE CHALLENGES OF DATA AND JUDGMENT UNCERTAINTY: CASE STUDY OF SAFETY ASSESSMENTS

Goethebaur MM1, Wagner M1, Nikodem M2, Zyla A1, Micaleff A1, Amalb A2

1Laser Analytica, Montreal, QC, Canada, 2Laser Analytica, Krakau, Poland, 3Merk&Co/SA, Trimex, UK

OBJECTIVES: Comparative safety assessment can be challenging due to differences in safety profiles between comparators, scarcity of data, difficulty in establishing causality, and deficiencies in reporting. To address this, a method combining prag- matic meta-analysis with advanced statistics is proposed. METHODS: We combined MCMC methods and decision theory to conduct risk assessments and policy decisions using a case study. RESULTS: The pragmatic MCMC model categorized adverse events (AEs) generally by their incidence; however, the model also incorporates advanced statistics such as cluster analysis. The results of the analysis were compared against published studies and local guidelines. CONCLUSIONS: The pragmatic MCMC model can be used to assess safety in a pragmatic way and can help to identify gaps in knowledge.