

Conclusions. The use of surrogate outcomes is common in NICE HST evaluations and the challenges in supporting surrogate relationships with more than biological plausibility are recognized. However, our review indicates that, the committee considers more than just biological plausibility and will take into account other related factors.

OP128 Improving Literature Searching For Evidence On Health Apps: The National Institute For Health And Care Excellence (NICE) MEDLINE And Embase (Ovid) Health Apps Search Filters

Lynda Ayiku (Lynda.ayiku@nice.org.uk) and Sarah Glover

Introduction. Literature searching for evidence on apps in bibliographic databases is challenging because they are often described with inconsistent terminology. Information Specialists from the United Kingdom's National Institute for Health and Care Excellence (NICE) have developed validated search filters for retrieving evidence about apps from MEDLINE and Embase (Ovid) reliably.

Methods. Medical informatics journals were hand-searched to create a 'gold standard' set of app references. The gold standard set was divided into two sets. The development set provided the search terms for the filters. The filters were validated by calculating their recall against the validation set. Target recall was >90%.

A case study was then conducted to compare the number-needed-to-read (NNR) of the filters with previous non-validated MEDLINE and Embase app search strategies used for the 'MIB214 myCOPD app' NICE topic. NNR is the number of references screened to find each relevant reference.

Results. The MEDLINE and Embase filters achieved 98.6 percent and 98.5 percent recall against the validation set, respectively. In the case study they achieved 100 percent recall, reducing NNR from 348 to 147 in MEDLINE and from 456 to 271 in Embase.

Conclusions. The novel NICE health apps search filters retrieve evidence on apps from MEDLINE and Embase effectively and more efficiently than previous non-validated search strategies used at NICE.

OP129 The Use Of A Text-Mining Screening Tool For Systematic Review Of Treatments For Relapsed/Refractory Diffuse Large B-Cell Lymphoma

Niamh Carey (nicarey@tcd.ie), Marie Harte and Laura McCullagh

Introduction. Human screening of title and abstracts in a systematic literature review (SLR) is labor intensive and time-consuming. In many instances, thousands of citations may be retrieved; the vast majority excluded upon screening. Text-mining semi-

automates and accelerates screening by identifying patterns in relevant and irrelevant citations, as labelled by the screener. One such text-mining tool, Abstrackr, uses an algorithm within an active-learning framework to predict the likelihood of citations being relevant. The objective of this study was to assess the performance of Abstrackr for title and abstract screening in an SLR of treatments for relapsed/refractory diffuse large B-cell lymphoma.

Methods. Citations identified from searches of electronic databases were imported to Abstrackr. An investigator-selected database of terms indicating relevance of title and abstract to the research question were uploaded. These terms were partly informed by the SLR inclusion/exclusion criteria. Citations deemed most relevant by Abstrackr were screened first (screening prioritization). Screening was carried out until a maximum prediction score of 0.4 or less, based on previous experience in the literature, was reached. Remaining citations were deemed unlikely to be relevant and did not undergo screening (screening truncation). Separately, a single-human screener screened all citations using Covidence.

Results. A total of 7,723 citations and 154 initial terms were uploaded to Abstrackr. Of these citations, 2,572 (33 percent) were screened before a prediction score of 0.39 was reached. Compared to single-human screening (conducted on all citations), the workload saving associated with Abstrackr was 5 days. A total of 451 (6 percent) citations proceeded to full-text screening; ten (0.1 percent) were included in the final evidence base. No citations predicted to be irrelevant by Abstrackr were included in the final evidence base.

Conclusions. Text-mining tools such as Abstrackr have the potential to reduce workload associated with title and abstract screening, without missing relevant citations.

OP130 Economic Evaluation Of High-Cost Drugs For Relapsing-Remitting Multiple Sclerosis In Thailand

Sarayuth Khuntha, Nuttakarn Budtarad (nuttakarn.b@hitap.net), Pritaporn Kingkaew, Phorntida Hadnorntun and Pattara Leelahavarong

Introduction. Drugs for relapsing-remitting multiple sclerosis (RRMS) are costly and not included in the National List of Essential Medicines of Thailand yet. This study aims to conduct an economic evaluation of high-cost drugs for RRMS.

Methods. The Markov model was used to estimate lifetime costs and quality-adjusted life years (QALYs) gained. The treatment options include Interferon beta-1a (IFN) and Teriflunomide (TERI) (first-line), Fingolimod (FIN) and Natalizumab (NATA) (second-line), and Alemtuzumab (ALEM) (third-line) compared with usual care. The effectiveness of drugs was retrieved by network meta-analysis. The probability of health state transition was obtained from primary data. Treatment-related costs were derived from the national database. Other costs and utilities were obtained from the study in Thai RRMS patients.

Results. The lowest lifetime costs option was usual care (THB2 million) (USD65,808), while the highest QALY gained option