INTRODUCTION:

Ovid Medline, Cochrane Libraries and PubMed are three medical databases commonly searched for systematic reviews, all of which allow use of MeSH terms and which share many other common fields. However, the search platforms demand very different syntax which means search strategies cannot be used interchangeably. This project seeks to evaluate the fields which are common to all three databases and presents a time-saving application for translating searches.

METHODS:

Information was taken from online help guides and searches were tested in the search platforms.

RESULTS:

In all three search platforms it is possible to use all of the different ways of using MeSH terms: unexploded, exploded, focused (major focus), exploded major focus, and limited to a MeSH subheading (exploded or not). Floating MeSH subheadings are permitted in all three search platforms. There is an existing web-based translator (Polyglot Search Syntax Translator - https://www.npmjs.com/package/sra-polyglot) but at present it cannot translate either focused MeSH terms or line numbers. The new application is currently under construction. The most useful feature is the ability to translate line numbers grouped by Boolean commands. The application generates a long string of line numbers for use in PubMed or Cochrane from a grouped string in the Ovid format. For example, or/1-4 translates to (#1 or #2 or #3 or #4) and {OR #1-#4}.

CONCLUSIONS:

It is possible to translate most types of search query between the three search platforms explored here. The application for automating the translation of search syntax is a work in progress but there are some promising features particularly the ability to translate Boolean combinations of line numbers which could save a significant amount of time when translating large, complex searches for different search platforms.

VP29 Rapid Response In Health Technology Assessment: A Delphi Study

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ABSTRACT SUMMARY:

We developed a rapid response standard to be carried out in 35 days with eight steps, based on two rounds of a modified Delphi approach. All items reached consensus between 73% and 91%. This is the first consensus to our knowledge on methodological requirements on rapid response for health technology assessment to endorse a decision-making process.

INTRODUCTION:

Rapid response in health technology assessment comprises a set of steps used to retrieve reliable information about medical products and services from the perspective of the health manager. We build a consensus among Brazilian specialists in health technology assessment to propose guidelines for the development of rapid response.

METHODS:

Based on a systematic review that proposed eight methodological steps to conduct rapid response, we applied a modified Delphi technique (without open questions in the first round) to reach consensus among Brazilian experts in health technology assessment. Twenty participants were invited to judge the feasibility of each

methodological step in a five-point Likert scale. Consensus was reached if the step had 70% positive approval or interquartile range ≤ 1. The achievement of consensus was reached in the second round.

RESULTS:

The Delphi panel reached consensus in eight steps: definition of the structured question of rapid response; definition of the eligibility criteria for study types; search strategy and sources of information; selection of studies; critical appraisal of the included studies and the risk of bias for the outcomes of interest; data extraction from the included articles; summary of evidence; and preparation of the report.

CONCLUSIONS:

The guidelines for rapid response in health technology assessment may help governments to make better decisions in a short period of time (35 days). The adoption of methodological processes should improve both the quality and consistency of health technology assessments of rapid decisions in the Brazilian setting.

VP30 The Use Of Artificial Intelligence (AI) In HTA

PRESENTING AUTHOR:

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ABSTRACT SUMMARY:

Artificial Intelligence (AI) has been used in many different sectors of the society. It is now beginning to penetrate also healthcare. The structured way of performing HTAs fits very well with the approaches used and capacities available in AI. It will therefore most likely become an important part of the methodological arsenal for researchers in health technology assessment.

INTRODUCTION:

To make itself more relevant in a longer perspective HTA will have to make use of novel ways to improve it services; in particular in terms of rapid response, cost savings and reduction of risk of bias. The use of Artificial Intelligence (AI) offers significant assistance at essentially all stages of any HTA. It can search, retrieve, read and organise relevant literature, not only from traditional databases but from numerous data sources related to specific issues such as for example clinical trials, health outcomes, payment of services, and from databases in other areas such as in social, justice, and educational services, and public health.

METHODS:

This oral presentation will explain the use and feasibility of AI in HTAs based on the findings from a currently ongoing project in the province of Alberta Canada. It will include 1) An overview of AI in healthcare 2) Selected international efforts of using AI in systematic reviews, such as the Robotreviewer 3) Describe the information needed, and the development of the algorithms for using AI in HTAs 4) Report on the findings from a comparative study of human vs AI resources in performing an HTA.

RESULTS:

This project has just started, however preliminary findings from the comparative analysis of AI vs human performance on a specific topic for HTA will be presented.

CONCLUSIONS:

It is expected that the comparative study will demonstrate that artificial intelligence will become a useful tool in HTA in that it will significantly speed up systematic reviews, and decrease the risk of bias in syntheses of findings from research.